

**THE**

OCTOBER, 1946

# *Refrigeration*

AIR CONDITIONING  
EQUIPMENT

# INDUSTRY

MERCHANDISING \* INSTALLATION \* MAINTENANCE



SPECIAL ALL-INDUSTRY SHOW ISSUE



**Y**OUR ENTIRE refrigeration valve problem is under control when you specify Weatherhead Packless Valves. Only four moving parts provide easy, instant, positive "off" or "on" control. Other valves designed to do the same work have as many as fifteen moving parts.

Multiple diaphragms provide maximum flexibility and smooth operation.

Flat springs eliminate spring fatigue and enable our designers to reduce the over-all height of Weatherhead Packless Valves by half an inch or more . . . a desirable feature where installation space is at a premium.

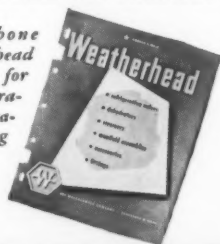
If grit or other foreign matter gets in the valve, the laminated seat in the lower stem takes the punishment and protects the body seat from destructive scoring.

Our designers have given careful attention to the appearance of Weatherhead Packless Valves too. All valves are equipped with handsome, round, easy grip handles, and "in line" inlet and outlet parts make possible perfectly symmetrical installations.

Weatherhead Packless Valves are available in a wide variety of sizes both flared and solder types.

**IT'S YOURS FOR THE ASKING!**

Write or phone any Weatherhead branch office for the fully illustrated, Refrigeration Catalog J-104-F.



Look Ahead with  
**Weatherhead**

THE WEATHERHEAD COMPANY, CLEVELAND 8, OHIO



NEW YORK • DETROIT • CHICAGO • ST. LOUIS • ATLANTA • DALLAS • LOS ANGELES

**ATTENTION REFRIGERATION ENGINEERS!**

We manufacture valves, dehydrators, strainers, manifold assemblies, accessories and fittings—an extensive line of original equipment for the refrigeration industry.

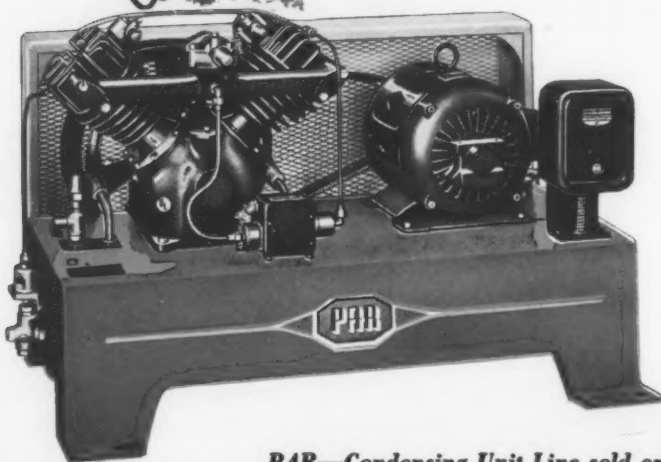
## Balanced Performance

Weigh **PAR** Performance and Construction, Feature by Feature ...you'll find **PAR** gives Dependable Economical **SERVICE PLUS!**



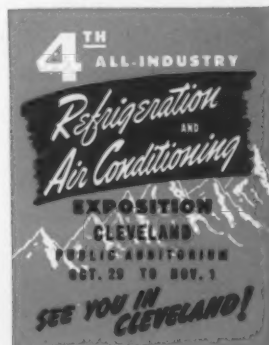
PAR BY *Lynch*

**M**ANY of the outstanding features built into every Par Condensing Unit are exclusive with Par. Features that give plus values in construction, performance and service. Weigh them—one by one, and see for yourself why Par tips the scales on Service Plus.




See your Par Jobber today  
—or write for Par Refrigeration Catalog R-97.

PAR—Condensing Unit Line sold exclusively through Franchised Refrigeration Supply Jobbers!



**Lynch** . . . By Comparison — You'll Buy **PAR**  
**Manufacturing Corporation**  
General Offices, Toledo 1 • Factory, Defiance, Ohio, U.S.A.

OCTOBER, 1946

A black and white photograph of a woman, Margo Black, operating a large, complex industrial machine. She is wearing a dark jacket over a light-colored blouse and is looking intently at the machine. The machine has various dials, switches, and a control panel. The background is dark and out of focus.

Take a look at what can't be seen

Margo Black, J & H Associate  
Plant No. 4

*Even a flat wheel* on a streamliner isn't as bad as an odd-sized ball in a ball bearing. That ball wears too fast, increases friction, leads to break-downs and needless cost. But no one could see or measure rapidly the fraction of an inch that would make that costly difference. So Jack & Heintz found a way. They developed an electronic ball sorter that separates balls automatically into 10 groups, the diameter of each group graded to an accuracy of *ten millionths of an inch* . . . and it does this *8 times as fast* as conventional equipment.

That's why Jack & Heintz ball bearings will last longer, hold friction at the minimum, reduce cost, keep shafts turning longer. These are all typical results of the Jack & Heintz *Mass Precision* technique that is being applied today not only to ball bearings but also to electric motors, compressors, aircraft accessories, electronic gauges and Eise-mann magnetos. And tomorrow this same Jack & Heintz *Mass Precision* will bring other important developments that will make equally startling savings in industry and homes.

See latest Jack & Heintz developments at  
All Industry Show . . . Booth 102

**JACK & HEINTZ PRECISION INDUSTRIES, INC.**

CLEVELAND 7, OHIO



# THE INDUSTRY

VOLUME 3, No. 10

OCTOBER, 1946

THIS MAGAZINE has no official affiliation with ANY group, society or association.

THE COVER . . . This month we're bringing you a preview in print of the Fourth All-Industry Refrigeration & Air Conditioning Exposition, to be held in Cleveland from October 29 to November 1. And crowds like this one won't be unusual, if the predictions of Show officials are confirmed. Fully 20,000 persons are expected to attend the event, at which approximately 200 firms in the refrigeration, air conditioning and frozen food locker field will display their newest products. (Photo from INS.)

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IRVING B. HEXTER, President

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# MUELLER BRASS CO. SIDE OUTLET STRAINER



Furnished with solder connections  
3/8", 1/2", and 5/8" O. D.

## REPLACEMENT OF FILTER EASILY MADE

The Mueller Brass Co. Side Outlet Strainer and Filter permits the removal and the replacement of filter or strainer cartridge, without disturbing the line connections.

In changing the cartridge, it is necessary only to remove the cap screws which hold the head firmly in position, then remove the old cartridge and replace with new. In operation, a tight seal is constantly maintained.

A coil spring provides constant pressure against end of cartridge which prevents by-passing of refrigerant between outside of cartridge and inner surface of shell. Car-

tridges are furnished in two types. The strainer type, which is made from 100 mesh bronze screen, and the filter type, which is equipped with an asbestos sack. Both types are protected by two brass strips that run the full length of the cartridge.

The ends are made from heavy brass forgings that are soldered to the shell which is made from hard drawn copper pipe.

The entire assembly is polished and lacquered after fabrication, giving it a neat and workmanlike appearance. ORDER THROUGH YOUR JOBBER.

**MUELLER BRASS CO.**  
PORT HURON, MICHIGAN

# KOLD-HOLD

## FOR THE BEST IN REFRIGERATION...

### Quick-Action SERPENTINE PLATES

Kold-Hold "Quick-Action" Serpentine Plates assure you the best in efficient, dependable refrigeration. The decade of experience which Kold-Hold has had in meeting the requirements of many different types of customers is reflected in the scientific construction features which distinguish these plates. The Kold-Hold principle of refrigerant flow, by which Serpentine Plates are fabricated into complete liners and shelves with all refrigerant joints eliminated and without interruption to flow gives these advantages:

1. Maximum prime surface.
2. Highest rate of plate heat acceptance obtainable with natural convection low sides.
3. Maximum pressure drop.
4. Freedom from oil logging — refrigerant circulates freely from inlet to outlet in one continuous pass.
5. No chance for short circuiting of the refrigerant.
6. Maximum K factor.

Individual Serpentine Plates, plate stands and cabinet liners are now being supplied completely fabricated or disassembled to many manufacturers of ice cream cabinets, frozen food cabinets, milk coolers and farm freezers.

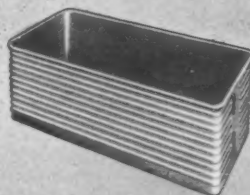
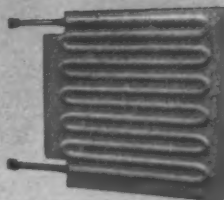
### Hold-Over TRUCK PLATES

Kold-Hold Streamlined "Hold-Over" Truck Plates transform delivery trucks into "cooler rooms on wheels." These plates hold the cold throughout the day, keeping truck bodies at low, uniform temperatures. If part of the load is left over at night, the system is simply connected to the plant ammonia line. No need for costly loading and reloading. Kold-Hold Truck Plates are leakproof, crackproof, clean and dependable . . . guaranteed to give lasting service.



#### WRITE FOR CATALOG

Just off the presses — the new Kold-Hold Catalog. Full and detailed information concerning all Kold-Hold refrigeration products. Send for your free copy today.



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Us in*

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**for food Preservation**

CLEVELAND  
PUBLIC AUDITORIUM

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AND  
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***LETHALAIRE***

**for food Sanitation**

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Oct. 29<sup>th</sup> to Nov. 1<sup>st</sup>*

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UNIT COOLERS**

**FOR 1946**

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These units have the correct ratio of C.F.M. to B.T.U. output. Quietness is achieved by use of low air velocities and balanced fans. Sturdy die-formed parts are assembled into smart, modern, streamlined units.

The ceiling type Chillator delivers a slow moving horizontal flow of high humidity air to all corners of the cooler, and is backed by knowledge and application of the famous McQuay Down Flow unit heater. The Chillator unit is desirable in low ceiling walk-in coolers because of its shallow height.

The wall type Chillator is excellent for reach-in and certain types of walk-in coolers.

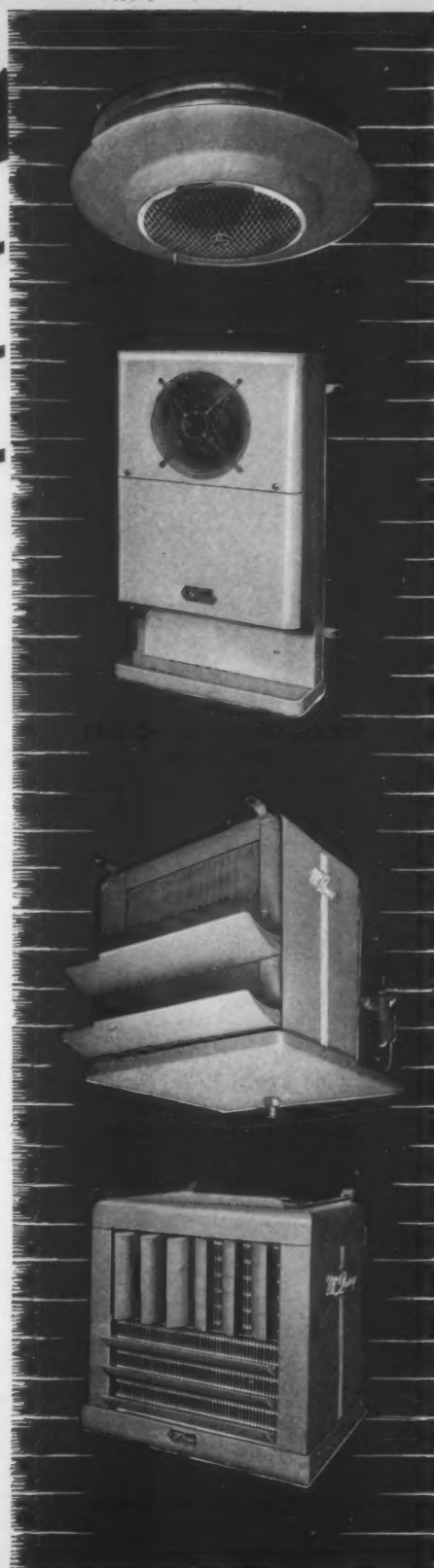
These units, together with the Standard and Junior unit coolers plus McQuay dependable refrigeration coils, give you everything needed for any commercial refrigeration application. All have the exclusive McQuay Ripple Fin coil construction—proved and preferred by users everywhere . . . McQuay, Inc., 1643 Broadway Street, N. E., Minneapolis 13, Minnesota.



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**• • AIR CONDITIONING EQUIPMENT  
ESPECIALLY DESIGNED FOR INDUSTRY**

VISIT McQUAY BOOTH 701,  
ALL INDUSTRY SHOW, CLEVELAND



OCTOBER, 1946



## He's on the Job...to further safeguard *Air Conditioning and Refrigeration Systems*

This operator's "on the job" tests are the first line of defense against corrosion, oxidation, or other damage to the finely machined parts within a refrigerating system.

Several times each hour a man on the job pictured above draws a sample of "Freon" from the production line. He allows the "Freon" to boil away in a Goetz bulb, carefully observing the boiling point range and on the alert for any residue of impurities. His results are checked and

double-checked by the same and other tests in the quality control laboratory, but this continual on-the-job control is one of the main reasons for the outstanding purity of "Freon."

The manufacture of "Freon" is intricate, complicated—requires special apparatus and tremendous "know how." But it results in the ideal refrigerant, non-corrosive to machinery, harmless to humans, mechanically practical for every refrigerating need. Let our Engineering

Department give you the story in detail. Write Kinetic Chemicals, Inc., Tenth and Market Sts., Wilmington, Delaware.

\* \* \*

**IMPORTANT**—When you're in Cleveland for the All-Industry Refrigeration and Air Conditioning Exposition, be sure to visit the "Freon" Booth. You'll see laboratory tests in action... learn how they insure the purity, dryness and uniformity of all "Freon" safe refrigerants.

### IMPORTANT FEATURES OF "FREON" SAFE REFRIGERANTS

1. Freedom from moisture... less than 25 parts per million.
2. Narrow boiling point range—confined within limits of  $1/2^{\circ}\text{C}$ .
3. Less than 2% of insoluble gases in vapor phase.
4. Freedom from acids. There are none in "Freon."
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**JOS. WOODWELL CO.**  
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## RHODE ISLAND

**E. I. REFRIG. SUP. CO.**  
81 Broadway  
Providence 3



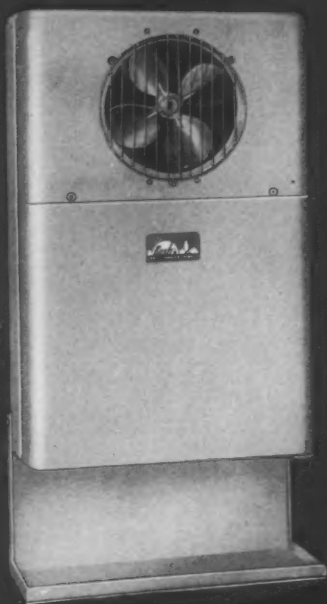
HERMETICALLY-SEALED • SELF-CONTAINED • REMOTE REFRIGERATION CONDENSING UNITS 1/4 TO 15 H.P.

**UNIVERSAL COOLER**

DIVISION INTERNATIONAL DETROLA CORPORATION  
MARION, OHIO • BRANTFORD, ONTARIO



# BUSH UNITS...



WALL MOUNTED  
UNIT COOLER

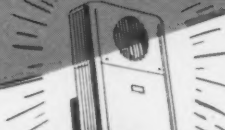
*GIVE TROUBLE -  
FREE, DEPENDABLE  
SERVICE!*



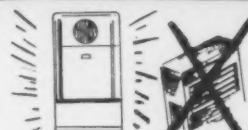
**CIRCULATION** — Warm air is sucked in from top shelves in rack-in coolers. Cuts down air stratification.



**COMPACT** — Ideal for low ceiling rack-in coolers. Takes little room leaves headroom free.



**FINISH** — Baked white enamel. Sanitary and easy to keep clean. Protects from rust and corrosion.



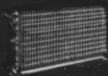
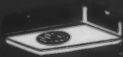
**CASES** — Made of Galvanneal Steel. Resist corrosion and provide excellent base for enamel coating.

The unfailing, trouble-free performance for which BUSH Units are famous will prove you are right in selecting BUSH. Repeat orders from jobbers, dealers, service engineers from every part of the country, have a special significance. They're proof of approval, indicating that BUSH Units are best because on their performance record they are the most economical . . . dollar for dollar . . . that can be specified.

Address BUSH MANUFACTURING COMPANY, Hartford, Conn.  
415 Lexington Avenue, New York, N. Y. • 549 W. Washington Boulevard, Chicago, Illinois. • Export Address 13 East 40th Street, New York, N. Y. • Cable "ARLAB"

# BUSH

## HEAT TRANSFER PRODUCTS



# SEE THESE *New* HENRY PRODUCTS

At the all-industry REFRIGERATION and AIR-CONDITIONING EXPOSITION\*

**New solenoid valves \* \***

**New pressure regulators**

**\* New check valves \* New**

**relief valves \* \* \* New**

**strainers \* New filters**

**New float switches**

**Look ahead with Henry**



\*Booth 227, Cleveland  
October 29—November 1



The House of Henry Products: Control Devices, Valves,  
Drains, Strainers, Filters and Accessories for Refrigeration,  
Heat and Air-Conditioning and Industrial Applications

**HENRY VALVE COMPANY • CHICAGO, ILL.**

"See You at  
the Show!"

Space  
702-704

Cleveland Public Auditorium



● Curtains will be flung wide!  
**Miss Peerless** wants to meet you.  
She's holding your tickets for the  
showing of **PEERLESS** products at the  
Fourth All-Industry Refrigeration and  
Air Conditioning Exposition October  
29 to November 1 in Cleveland. Don't  
miss the **PEERLESS SHOW!** We have  
information to give you about tre-  
mendous developments made in the  
**PEERLESS** line of equipment. Get the  
facts on why it's superior, facts you  
can use to get a good share of the  
business ahead. **PEERLESS** will have  
**NEW 1947 PRODUCTS** on display.  
Enough said! This is the show to put  
down as a "must see" on your list.



**PEERLESS**

**OF AMERICA, Inc.**

333 N. Michigan Avenue • Chicago 1, Illinois, U.S.A.

# KNOW YOUR REFRIGERANT CORROSION LIMITS

## EFFECTS OF MOISTURE

Moisture in a refrigerating system may cause any or all of the following:

1. Freezing up at expansion valve or capillary tube, ice in the evaporators.
2. Corrosion of metals to form sludge.
3. Copper Plating.

## RESULTS OF TESTS CONDUCTED ON STEEL

Refrigerant	% Water by Weight	Results
Sulfur Dioxide	0.03	Slight discoloration
	0.10	Slight scale
	0.15	Heavy scale Presence of air did not affect results
Methyl Chloride	0.02	Slight discoloration
	0.03	Marked discoloration
	0.05	Very slight scale Moderate to heavy scale Presence of air increased corrosion in all cases
"Freon-12"		Similar to methyl chloride

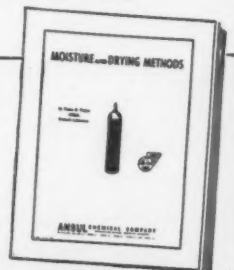
## FACTS REVEALED

1. Corrosion of metals occurs whenever the amount of water present exceeds fairly well defined limits.
2. Water reacts with sulfur dioxide, methyl chloride, "Freon-12" and other refrigerants to form acids.
3. These acids react with steel, copper, and aluminum parts of a refrigerating system to form definite metallic salts (sludges).
4. In a sulfur dioxide system the amount of moisture tolerable is higher than in a methyl chloride or "Freon-12" system but corrosion, once begun, proceeds more rapidly in a sulfur dioxide system.
5. Corrosion in a butane or isobutane system is due to the direct action of the water and perhaps, air, on metals.
6. Moisture tolerances are higher for copper, brass and aluminum than for steel.
7. Moisture tolerances are lower at higher temperatures found in condenser and compressor than at room temperature.
8. Corrosion is much worse in the presence of air in all refrigerants except sulfur dioxide.
9. Approximately 90% of the sludges produced in refrigerating systems are due to moisture; the others are associated with oil and minor causes.

### SEND FOR THIS BULLETIN

An informative reprint, "MOISTURE and DRYING METHODS," will be sent on request. No obligation. Send for it today.

ANSUL WHOLESALERS are ready and equipped to render an intelligent, co-operative service to refrigeration engineers and maintenance men on problems which arise from time-to-time in the operation of refrigerating systems.



\*REG. U. S. PAT. OFF.

ANSUL REFRIGERANTS ARE AVAILABLE AT LEADING WHOLESALERS EVERYWHERE

# ANSUL CHEMICAL COMPANY

REFRIGERATION DIVISION, MARINETTE, WISCONSIN

DISTRIBUTORS FOR KINETIC'S "FREON-11," "FREON-12," "FREON-21," "FREON-22" AND "FREON-113"



# ANNOUNCING THE NEW . . . .

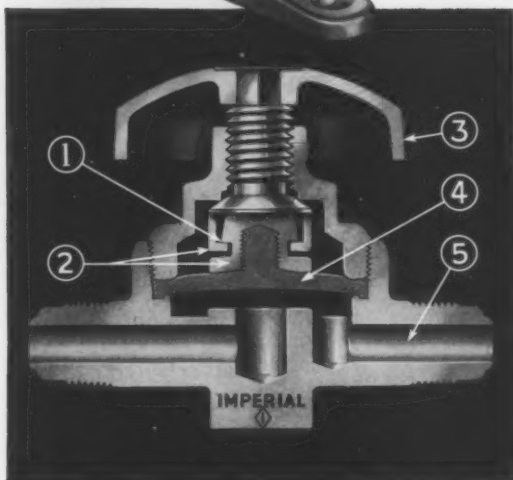
## IMPERIAL DIA SEAL VALVE



**NO SPRINGS**

**"EITHER-WAY" FLOW**

Imperial leads again with a major advance in refrigeration valve design. The DiaSeal is a diaphragm valve built along entirely new principles—offers outstanding superiorities in performance. Proved and tested both in the laboratory and in the field. Note its advantages:



**1. NO SPRINGS**—Direct lift provides positive control with flow in either direction.

**2. ONLY TWO MOVING PARTS**—Simple construction assures greater dependability.

**3. EASY FINGER-TIP ACTION**—Quick, sure opening and closing with less than two turns of handle.

**4. LONG LIFE DIAPHRAGM** is impervious to all common refrigerants. In actual tests, has withstood over 1,000,000 openings and closings under refrigerant pressure.

**5. INLET AND OUTLET PORTS IN LINE.** Simplifies installation.

Both internal parts of the DiaSeal lift out with the bonnet, facilitating soldering in line. Extremely low height cuts installation space.

Furnished in 2-way and angle types, with either flare or solder connections. The Imperial Triple-Seal Groove is an added feature on flare connections  $\frac{3}{8}$ " and larger.

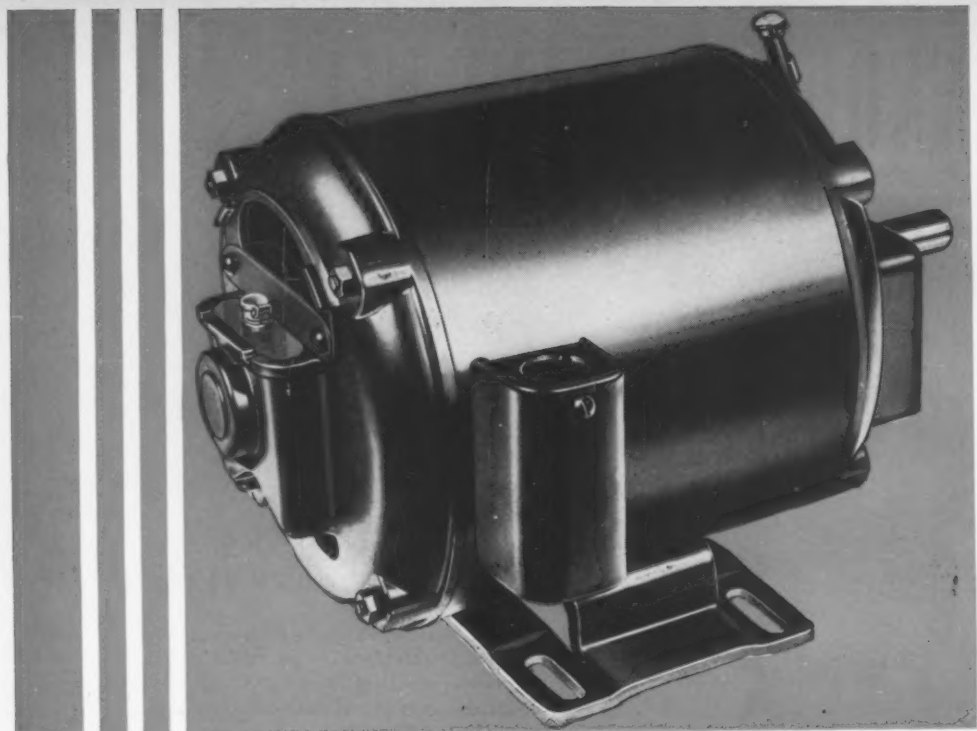
**SEE YOUR JOBBER**

# IMPERIAL

THE IMPERIAL BRASS MFG. CO.  
536 South Racine Avenue, Chicago 7, Illinois

FITTINGS • VALVES • FILTERS •  
FLOATS • DEHYDRATORS • CHARGING  
LINES • TOOLS FOR CUTTING, FLAR-  
ING, BENDING, PINCH-OFF AND SWEDGING

*Visit Our Booth No. 128 at the All Industry Show*



## ***This Two-in-One Motor Handles a Wide Variety of Jobs Efficiently and Economically***

The Wagner type RA repulsion-start induction motor is indeed worthy of its reputation as the "general-purpose motor" of the single-phase motor field. Its electrical characteristics combine the best features of two types of motors: the repulsion motor during the starting period, and the induction motor while running at rated operating speeds.

As a repulsion motor, the Wagner type RA motor has a high starting-torque that enables it to start high-inertia loads and accelerate them smoothly. At the same time it requires the lowest starting-current of any type of single-phase motor, and is therefore the least likely to cause light flicker.

As an induction motor, the Wagner type RA motor has a fairly constant and high operating-speed at all operating loads, and a flat efficiency curve over a wide operating range.

This versatile motor is not only exceptionally suited for use on practically *every* type of motor-driven appliance and machine normally utilizing single-phase current, but is also the *only* choice for a wide variety of applications because of its low upkeep cost, minimum servicing, freedom from vibration and noise, and years of reliable service.

For complete information, write for Bulletin MU-185, and address your request to Wagner Electric Corporation, 6442 Plymouth Avenue, St. Louis 14, Mo.

***Consult Wagner Engineers on all Electric Motor Problems***

#### **Sales and Service Branches:**

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ington 5 • In Canada: Wagner  
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M46-22

# **Wagner**

**LOCKHEED HYDRAULIC BRAKE PARTS AND  
FLUID... NoRoL... CoMaX BRAKE LINING**

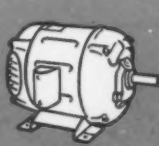


# **Electric**

**AIR BRAKES...TACHOGRAPHS...ELECTRIC MO-  
TORS...TRANSFORMERS...INDUSTRIAL BRAKES**



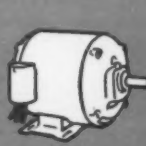
**REPULSION-START INDUCTION**



**REPULSION-INDUCTION**



**CAPACITOR-START INDUCTION**

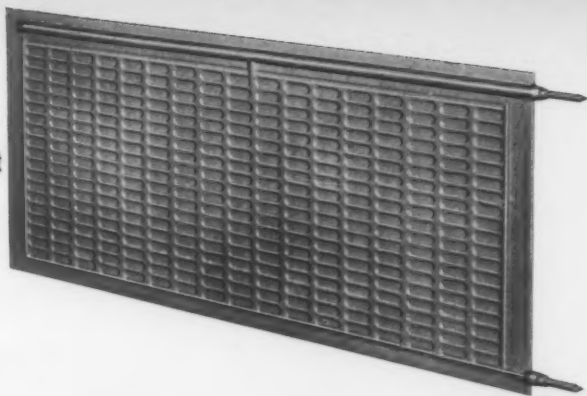


**POLYPHASE**



**DIRECT-CURRENT**

**It Establishes a  
Brand New  
Standard for  
Low Temperature  
Refrigeration**



## **THE HUBBELL-YODER SYSTEM OF COMPLETE SURFACE FREEZING**

*Every square inch of plate area  
is prime heat pickup . . .*

Don't get the impression that a Hubbell-Yoder plate is merely another refrigeration plate. There's a certain family resemblance, it's true, as far as appearances are concerned. But looks are not—as the saying goes—everything. If you measure it by what it *does*—

Mister, that Hubbell-Yoder plate sets a mark for all other refrigeration plates to shoot at. For example—

Hubbell-Yoder plates, properly engineered in a freezer cabinet will reduce the interior temperature from room temperature to sub-zero in three hours.

That isn't a "claim"; it's a *fact*.

Do you make such quick freeze equipment? Do you sell plate banks for frozen food locker plants? Or sharp freeze shelf stacks? Or low temperature equipment of any sort? If you do, it will pay you to remember that the Hubbell-Yoder oval on the freezing unit—which is the real heart of the installation—assures top drawer performance for your customer and, naturally, top drawer prestige for you.

Let's skip technicalities. See these sensational plates for yourself in Cleveland. Booth 1012.



International Sales Agents  
**ENGINEERING SERVICE INC.**

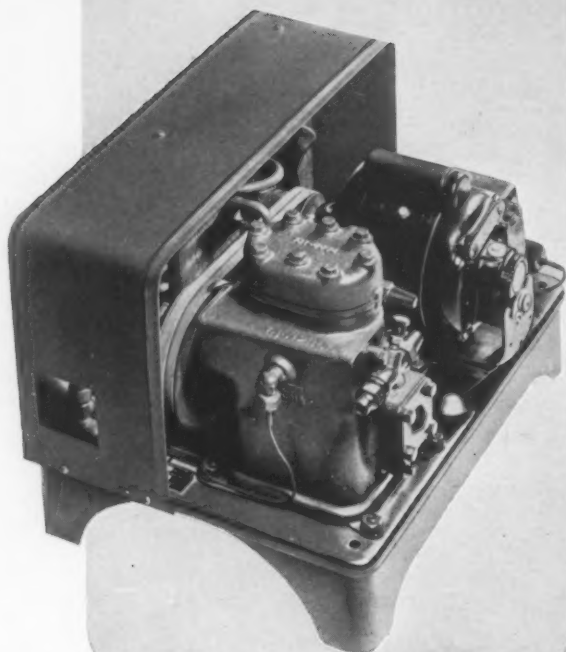
1311 WEST 80TH STREET

CLEVELAND 2, OHIO

**COMPACT,**

**COMPETENT**

**COOLING**



*Carrier 7J1 air-cooled condensing unit. Capacity  $\frac{1}{4}$ ,  $\frac{1}{2}$  or  $\frac{3}{4}$  hp. Low base for self-contained applications, high base for remote installations. Other small condensing units available up to 3 hp.*

**C**ARRIER's small condensing units are designed to supply efficient, low-cost refrigeration for coolers and cabinets requiring modest capacity. They're streamlined to save space. They're quality built to insure lower operating and maintenance costs and long life.

These small condensing units are engineered with the same skill that distinguishes all Carrier products. Every feature has been field tested and proved. The unit is quality built to give the utmost in service, dependability, and economy on the particular installation for which it was designed.

The capacity of Carrier small condensing units ranges from  $\frac{1}{4}$  to 3 hp., in air-cooled or water-cooled models. Two-cylinder compressors have V-belt drives and pressurestat control. For larger installations, there are condensing units and compressors with capacities up to 60 hp. and the famous Carrier centrifugal refrigerating machine with a capacity from 100 to 1200 tons.

With Carrier equipment, you get the *extra* assurance of Carrier research, experience, and manufacturing skill. If it's Carrier, it's correct. Carrier Corporation, Syracuse, New York.



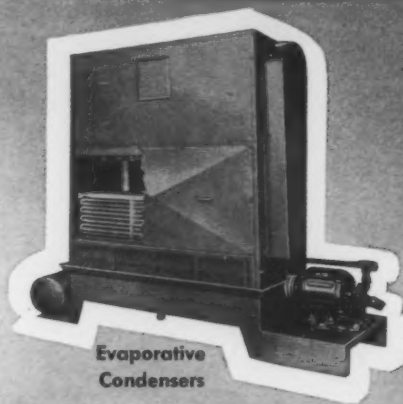
**{ AIR CONDITIONING  
REFRIGERATION  
INDUSTRIAL HEATING**



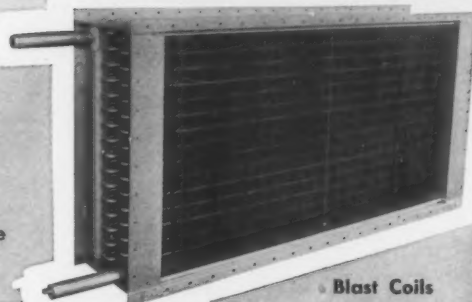
# The MARLO Line

Ball-Bonded Blast Coils—Cooling and Heating • Air Conditioning and Refrigeration Apparatus • Industrial Blower Units • Unit Coolers • Evaporative Condensers and Coolers • Low Temperature Apparatus

SEE OUR COMPLETE LINE IN CLEVELAND

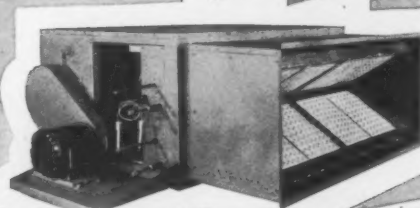


Evaporative  
Condensers

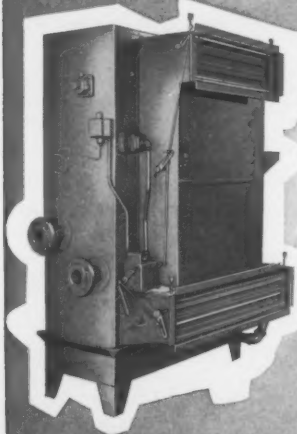


Blast Coils

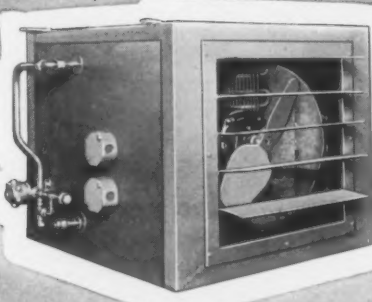
Unit Coolers  
"Pull-Through" Type



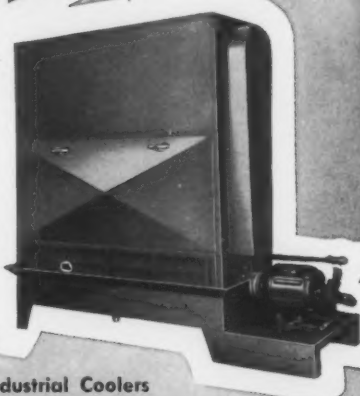
Air Conditioning  
Units



Evaporative Diesel Cooler



Low Temperature Units

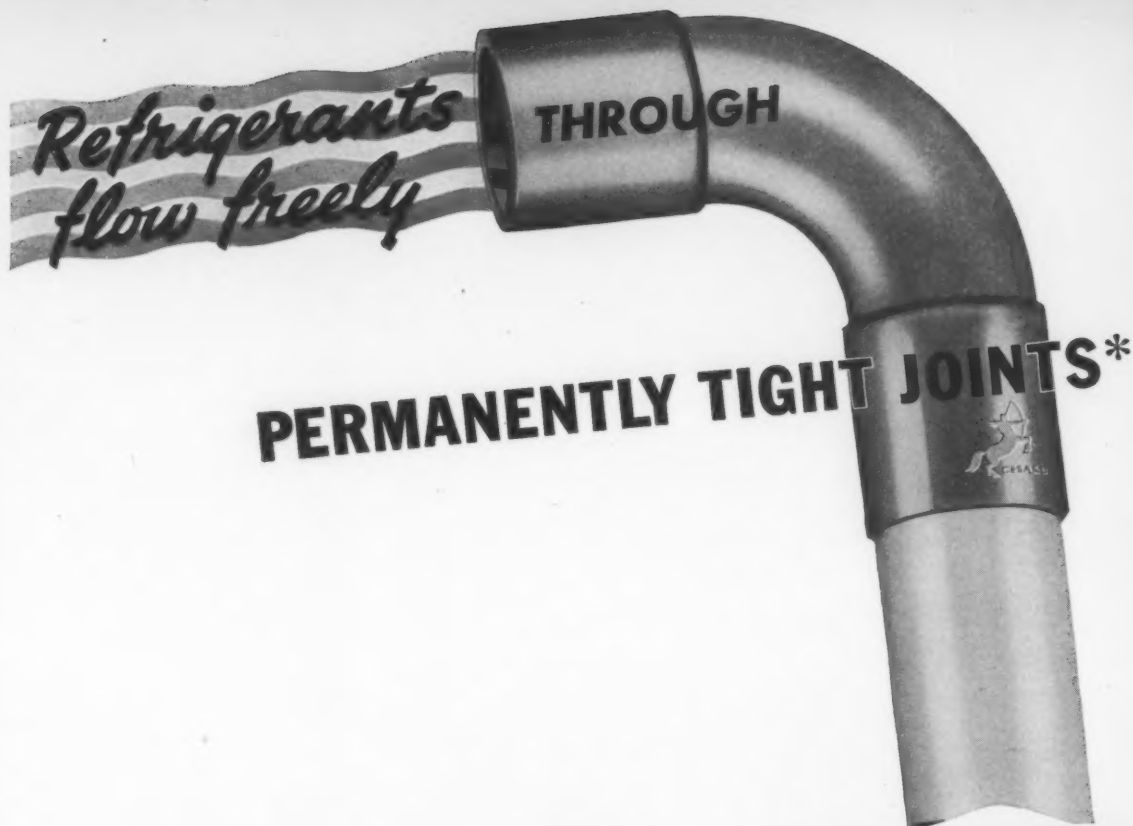


Industrial Coolers

"MARLO MEANS HEAT TRANSFER EQUIPMENT"

## MARLO COIL COMPANY

ST. LOUIS 10, MISSOURI



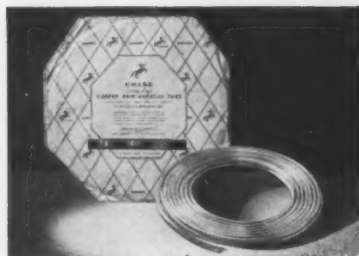
## \*made with **CHASE** wrought copper fittings

**C**HASE fittings for Refrigerator Tube fit the tube *accurately* . . . no inside ridges to hamper free flow of refrigerants.

Made of *wrought* copper, Chase Fittings are sound, non-porous. Refrigerant gases cannot penetrate or permeate them. Soldered to Chase Extra Soft Tube, they form a tight, leak-proof joint.

*And* : : : Chase Wrought Copper Fittings expand and contract in exactly the same ratio as the tube. They are not affected by ordinary vibration or pressure. The joint *stays tight!*

Ask your distributor for Chase Wrought Copper Fittings and Chase Extra Soft Copper Refrigerator Tube. That's the combination for better, longer-lasting connections.



### **CHASE Extra Soft Copper Tube in an Extra-Handy package**

Chase Copper Refrigerator Tube is *extra soft* for easy bending. Positive end seal fits anywhere the tube will fit—need not be removed till you're ready to make connections.

Space-saving package is plainly labeled with full specifications—can be reused to protect and identify cut coils. Tube sizes:  $\frac{1}{8}$ " to  $\frac{3}{4}$ " diameters, 50' and 100' lengths.



**Chase**  
**BRASS & COPPER CO.**

**Waterbury 91, Connecticut**  
SUBSIDIARY OF KENNEDY COPPER CORPORATION

*This is the Chase Network—handiest way to buy brass*

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# HERE'S AMCOILS TWO-FOLD ANSWER TO FOOD CONDITIONING AND FREEZING

**AMCOIL DELUXE  
FOOD CONDITIONER**  
*Cools without Dehydration*



Pat. Pend.

**AMCOIL ZERO BREEZE  
LOW TEMP UNIT**  
*Defrosts without Defreezing*



Pat. Pend.

Only an Amcoil Deluxe Food Conditioner can do this *double job* — cooling and preventing dehydration at the same time. **EXTRA FEATURES** for complete automatic control, it maintains high humidities (up to 85%), while cooling down to 36° E. This double-duty performance not only preserves but insures a minimum waste from trimming and a maximum retention of natural bloom and freshness of meats, or on *any* products where dehydration is a factor. It sells itself because it pays for itself.

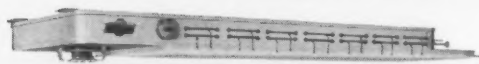
Also available now is the Utility Food Conditioner, designed to meet the need for a moderately priced unit for cooling and preventing dehydration.

Investigate these profit makers today. Send for bulletin FC (Deluxe) and UDF (Utility) NOW!

The Amcoil Zero Breeze Low Temperature unit has a built-in device to assure automatic defrosting of the cooling coil during each refrigeration off cycle. It's something new for better preservation and storage of frozen food products at temperatures between +20° E and -20° E. It has three controls: (1) manual defrost, (2) semi-automatic defrost, or (3) fully automatic defrost.

For best results from this completely modern automatic, Zero Breeze low-temp unit, be sure you have an experienced *low temperature* installation man. The AMCOIL Engineering Department will make recommendations for your type of application on request.

## COMING SOON AMCOIL DISPLAY CASE FOOD CONDITIONER



Especially designed for efficient cooling and *preventing dehydration* at temperatures down to 36° F. in all kinds of display cases. This unit can be easily installed without remodeling case.

**DEALERS  
JOBBERS**  
STOCK THIS  
COMPLETE  
LINE  
**ACT TODAY**

## OTHER FAST MOVING AMCOIL PROFIT MAKERS

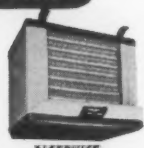
AMCOIL SURFACE PAT. #2,402,262



UTILITY  
FOOD CONDITIONER



UTILITY  
DOWNDRAFT



ALSERVICE  
OPEN FACE



TWO WAY  
CEILING MOUNTED



REACH-IN  
PANEL UNIT



COMFORTAIRE CONDITIONER  
PAT. NO. 2,405,812

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1553 N. 37 St., Seattle 3, Wash.



## AMERICAN COILS CO.

Philadelphia Office:  
M. H. McTurk, Mgr.  
250 N. 15th Street  
Phone: Rittenhouse 6-9563

Chicago Office:  
H. C. Moore, Mgr.  
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Phone: Superior 4-859

**SEE YOU IN CLEVELAND—BOOTH 911**



# Why the CUP-SEAL?

As coils leave the annealing furnace, warm, dehydrated air is blown through tubes. Ends are then Cup-Sealed.



**E**VERY REFRIGERATION serviceman knows that only a few drops of water in a refrigerating system can be an annoying and expensive source of trouble. This problem of moisture is so important that specifications of the American Society of Refrigerating Engineers include the following:

*"The maximum permissible water content of refrigerant system tubing or cooling coils as received at the point of installation shall be 300 milligrams per cubic foot of internal volume of the tubing or coil."*

In the production of Anaconda Copper Refrigeration Tubes, every care is taken to guard against harmful moisture: Tubes are made uniformly soft

\*Patent Applied For

in special type annealing furnaces employing controlled atmospheres. Immediately after annealing, warm, dehydrated air is blown through the tubes. Then—as positive protection against dirt and moisture—both ends are sealed with the exclusive Anaconda Cup-Seal, retaining the clean, bright dry interior of the tube from the mill to the point of installation.

The Anaconda Cup-Seal helps retain roundness of the tube while cutting off the sealed end, reduces waste, eliminates the possibility of damage or injury caused by jagged, flattened edges. Specifying Anaconda Refrigeration Tubes by name is a profitable habit.

40435



Routine tests show that the moisture content of Anaconda Refrigeration Tubes is consistently below limits established by the American Society of Refrigerating Engineers.

**ANACONDA**  
**Anaconda**  
**REFRIGERATION TUBES**  
**THE AMERICAN BRASS COMPANY**  
**French Small Tube Branch**

General Offices: Waterbury 88, Connecticut  
 Subsidiary of Anaconda Copper Mining Company  
 In Canada: ANACONDA AMERICAN BRASS LTD.,  
 New Toronto, Ont.



# New

## "DETROIT"

### No. 573

## THERMOSTATIC

## EXPANSION

## VALVE

All The Reliability  
of No. 673 For  
Smaller Installations



The latest addition to the "Detroit" line of Expansion Valves is No. 573.

Tests show it has the sturdy performance of the No. 673. It is designed for small commercial installations and on such develops operating characteristics superior to single diaphragm valves at no penalty in cost. It has a two diaphragm gas charged power element offering gas charging in its simplest, most effective form—a single efficient power element.

Try these valves on your next suitable job. They provide the same trouble-free control as the No. 673.

#### CAPACITIES OF NO. 573 VALVE

Rated at  $\frac{1}{2}$  ton Freon-12, or .9 ton Methyl

#### UNIT NUMBERS OF NO. 573 VALVE

(Stock Items with Your "Detroit" Jobber)

Unit No.	Refrigerant	Max. Pressure	Connection
57300	Freon-12	45	Inlet $\frac{3}{8}$ " SAE for
57309	Freon-12	10	$\frac{3}{8}$ " x $\frac{1}{4}$ " reducing nut
57311	Methyl	35	Outlet $\frac{3}{8}$ " SAE for
57315	Methyl	5	$\frac{3}{8}$ " x $\frac{3}{4}$ " reducing nut

Use "Detroit" Unit Numbers When Ordering.

#### SEE THIS VALVE AND OTHER DETROIT LUBRICATOR REFRIGERATION PRODUCTS AT

The All Industry Refrigeration and Air Conditioning Exposition—Cleveland Public Auditorium, Oct. 29 to Nov. 1, 1946: North Exhibit Hall Booths 503 and 603

### DETROIT LUBRICATOR COMPANY

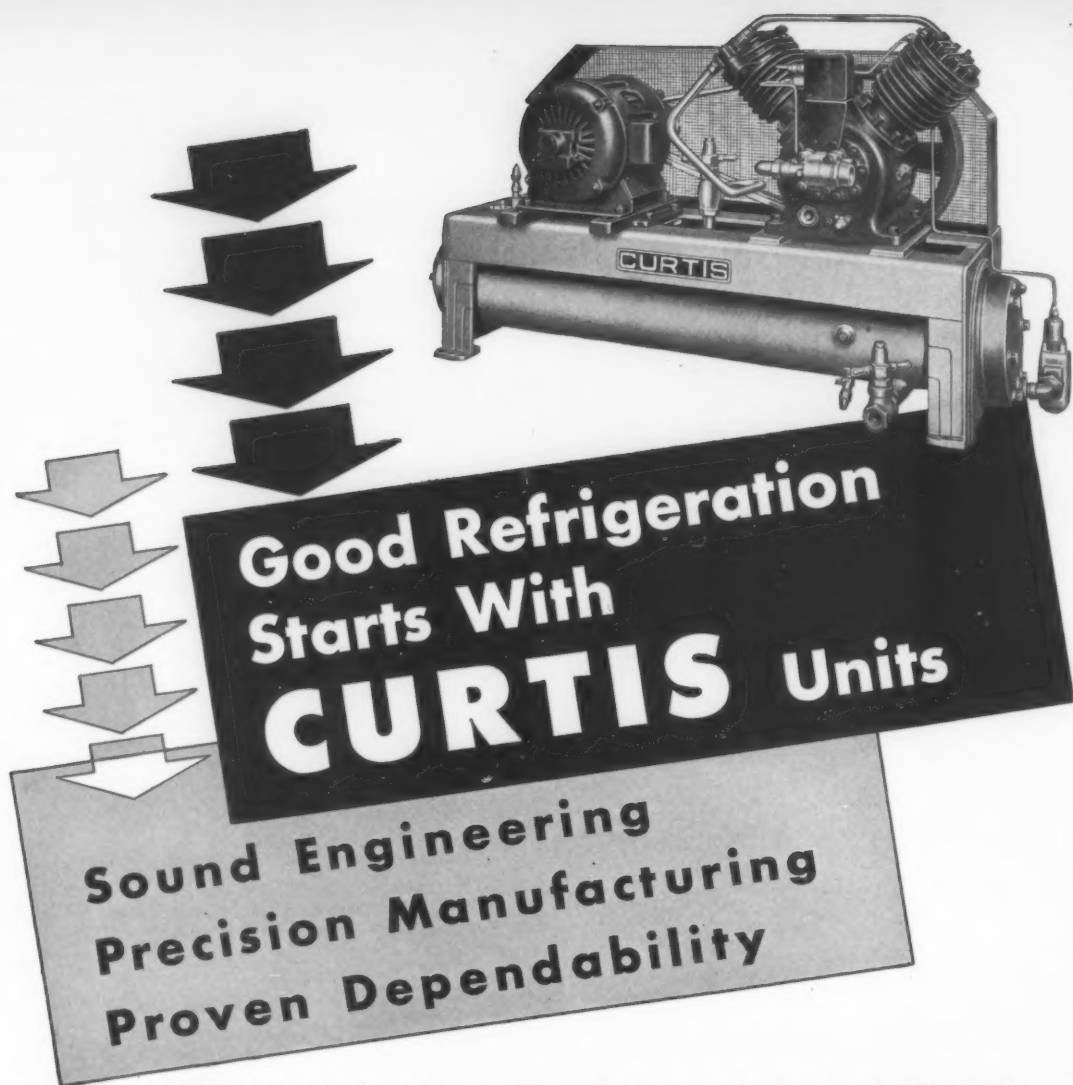
General Offices: 5900 TRUMBULL AVENUE  
DETROIT 8, MICHIGAN

Division of **AMERICAN RADIATOR & Standard Sanitary CORPORATION**  
Canadian Representatives—RAILWAY AND ENGINEERING SPECIALTIES LIMITED, MONTREAL, TORONTO, WINNIPEG



"Detroit" Heating and Refrigeration Controls • Engine Safety Controls • Safety Float Valves and Oil Burner Accessories • "Detroit" Expansion Valves and Refrigeration Accessories • Stationary and Locomotive Lubricators





**Good Refrigeration  
Starts With  
CURTIS Units**

**Sound Engineering  
Precision Manufacturing  
Proven Dependability**

The foundation of any refrigeration system is the Condensing Unit. Curtis' record of dependable, economical performance, high efficiency, and low maintenance expense, is your guarantee that when you install Curtis it will be sound from every angle.

Whatever the application, for food preservation, for freezing, for locker plant operation, or for air conditioning — there's a Curtis Unit engineered to best fit each particular requirement. Your customers will be thoroughly satisfied with Curtis performance. Thousands of Curtis installations are giving trouble-free service and have for many, many years.

## **CURTIS REFRIGERATING MACHINE DIVISION**

*of Curtis Manufacturing Company*

1915 Kienlen Avenue      St. Louis 20, Missouri

*92 years of successful manufacturing*

B-504



# Welcome

## TO THE ALCO VALVE EXHIBIT BOOTH 914 • CLEVELAND

The entire sales and engineering staff of Alco Valve Company will be in Cleveland to welcome their friends in the Industry. We look forward to meeting all the new members of the Industry. Come right in and make yourself at home.

We will show our standard products and many completely new controls. We will be glad to discuss any of your problems with you.

See you in Cleveland!



Designers and Manufacturers  
of Thermostatic Expansion  
Valves; Pressure Regulating  
Valves; Solenoid Valves;  
Float Valves; Float Switches.

### ALCO VALVE CO.

843 KINGSLAND AVE. • ST. LOUIS 5, MO.



## America's most complete line of WATER COOLERS

Sunroc specializes in water coolers... makes the finest and most diversified line of water coolers on the market today. The post-war line of Sunroc Water Coolers embraces a wide range of AC and DC models engineered to meet varying business, industrial, and institutional needs.

With sights held to the national market, Sunroc backs its top-grade, nation-wide distributor and dealer organization all the way. Backs it with merchandise now. Backs it with full factory cooperation in the field. Backs it with intensive promotion, hard-hitting national and local advertising, sharp-shooting direct-mail to selected prospects... unremitting sales effort designed to hold and widen Sunroc's margin of leadership.

If you see yourself in the Sunroc picture, you will want full information on Sunroc's product, prospects and plans. The coupon below is the first step toward a Sunroc franchise... act today. Sunroc Refrigeration Company, Glen Riddle, Pa.

# SUNROC

WATER COOLERS • GLEN RIDDLE, PA.



*"There's nothing like a cool drink of water"*



Model NM1B.  
Capacity 5 gals. per hour.



Model NM2B.  
Capacity 10 gals. per hour.



Model NM3B.  
Capacity 15 gals. per hour.



Model NM4B.  
Capacity 30 gals. per hour.



Model US7B2  
(Bottle Cooler)  
Capacity 3 gals. per hour



Cafeteria Model.  
(Five large-capacity models)

### SUNROC REFRIGERATION COMPANY, Glen Riddle, Pa.

Gentlemen:

Please send me full particulars on the Sunroc Water Cooler dealer-franchise, and your story of "One Product, One Price, One Policy."

Name.....

Street.....

City and State..... RI-10

I am ☐ now a water cooler dealer  
I am ☐ not a water cooler distributor

THE REFRIGERATION INDUSTRY



# BONNEY TOOLS



## *Make Jobs Easier, Faster, Safer*

Every tool in the complete Bonney Line is designed to simplify the job of tightening and loosening bolts and nuts.

Bonney Tools make jobs easier because they are designed right . . . they help you get jobs done faster because they are accurately machined for a perfect fit, and they are safer to use because they are made from fine alloy steels and are

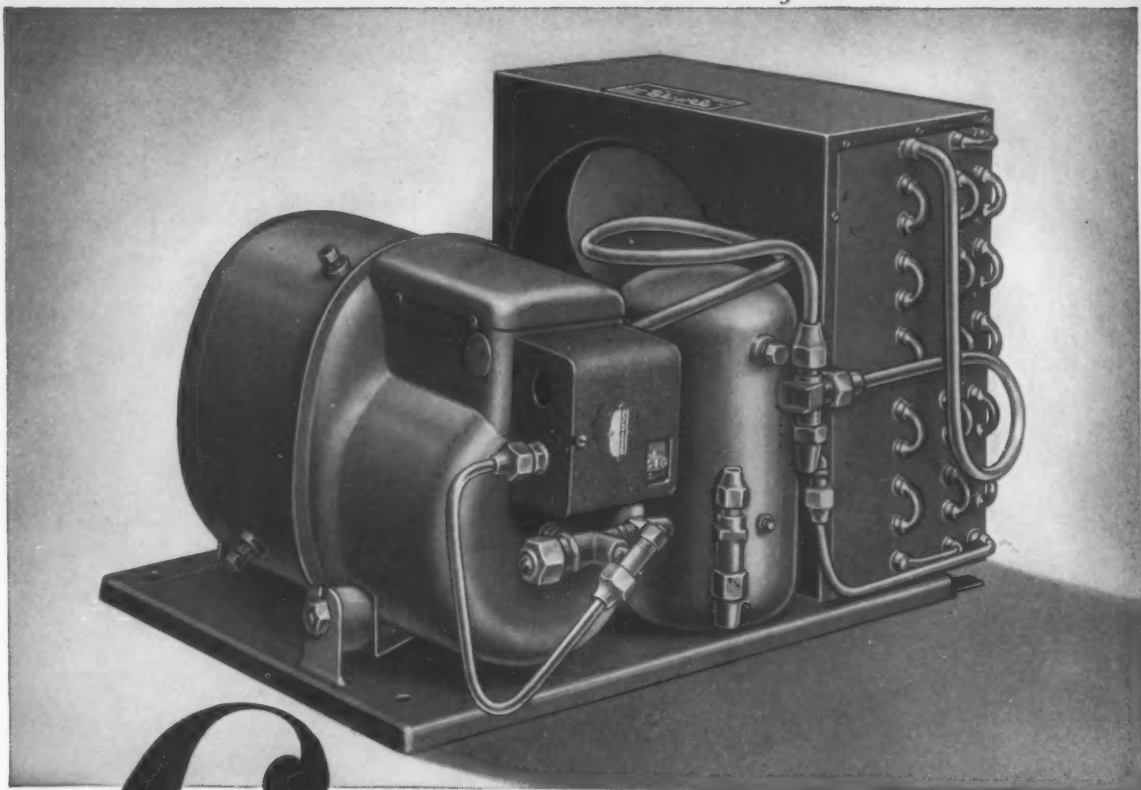
"precision" heat-treated.

If you are one of the many mechanics who has been using Bonney Tools, you'll be glad to know that you can again get more of them from your nearest Bonney Tool Jobber or Distributor. If you haven't tried these easier, faster, safer-to-use Bonney Tools, ask your Bonney Tool Jobber or Distributor to show them to you. Or write for the new Bonney Tool Catalog.

**BONNEY FORGE & TOOL WORKS**  
719 N. MEADOW ST., ALLENTOWN, PA.







# 6 reasons for visiting the Servel Supermetic exhibit

At booth No. 901 at the All-Industry Exposition at Cleveland this month, you'll see the units the whole industry is talking about —Servel Supermetics—and six big reasons for their popularity

You'll see:

- 1. THE BROADEST FRACTIONAL HORSEPOWER LINE** in the industry, including twelve fractional horsepower steel case hermetic units.
- 2. SAMPLES OF TWENTY** integral horsepower models of cast-case, field-serviceable hermetic units for bigger jobs.
- 3. LOW TEMPERATURE UNITS** for home freezers and ice cream cabinets; medium temperature units for regular commercial jobs; and high back pressure units for room coolers and special applications in practically every size —both water-cooled and air-cooled.
- 4. BELT-DRIVEN MODELS** and special compressors for odd frequency DC, mobile refrigeration, and other non-standard applications.

**5. THE RIGHT POWER** for every job, enabling Servel dealers and allied fixture manufacturers to avoid corner cutting and compromise.

**6. COMPETENT ENGINEERING** and precision manufacturing combined to build the finest, most dependable power units in the industry.

*Don't Miss BOOTH NO. 901*

## Servel, Inc.

ELECTRIC REFRIGERATION DIVISION • EVANSVILLE 20, INDIANA

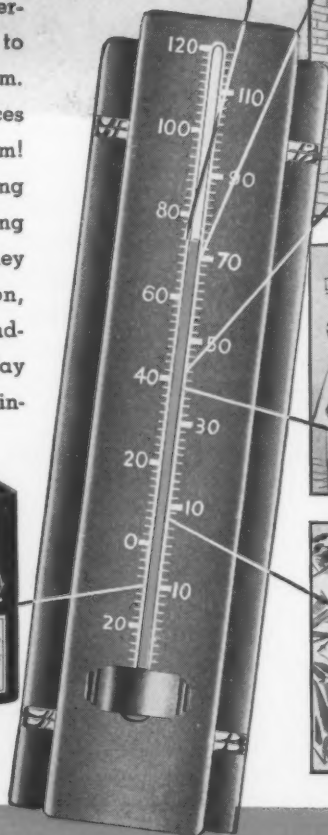
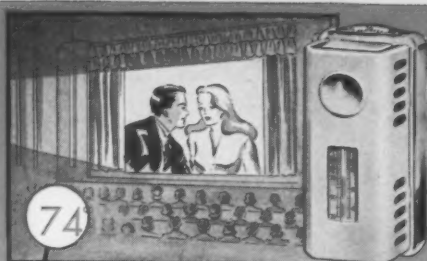
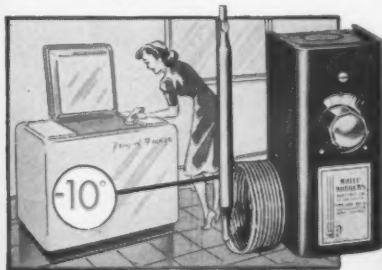


# Set it and FORGET IT!

No matter what the temperature application, White-Rodgers controls will take care of it . . .

- easily
- accurately
- dependably

Rely on White-Rodgers temperature or pressure controls to perform exactly as you set them. Except for individual preferences you actually can forget them! Specified as standard by leading manufacturers of air-conditioning and refrigeration equipment, they bring you ease of installation, accurate and completely dependable performance. Write today for refrigeration catalog and installation data.



## WHITE-RODGERS ELECTRIC CO.

ST. LOUIS 6, MISSOURI

*Controls for Refrigeration • Heating • Air Conditioning*



## Designed and Engineered for Maximum Performance - - -

in all refrigeration and air-conditioning systems, the SUPERIOR line includes the famous Diaphragm Packless Line valves; globe, charging, purging or drain valves; hand expansion valves; Pressure cup (wing cap) globe valves; packed line, angle, compressor and cylinder valves; check valves; liquid indicators and sight glasses; quick couplers; gauge manifolds; economizers (heat-exchangers) and manifolds; dehydrators and filters; rapid-changers (refrigerant transfer systems); charging hose; and SAE flare fittings, including the new STA-TITE flare nuts which cannot creep or work loose.

*If you haven't a copy of SUPERIOR Catalog R-2, request one today.*

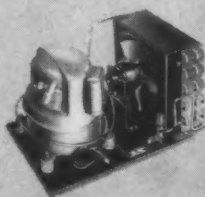
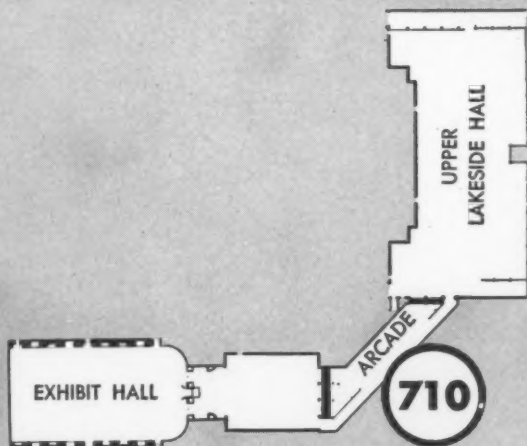
# SUPERIOR VALVE & FITTINGS COMPANY

PITTSBURGH 26, PENNSYLVANIA

OFFICES IN PRINCIPAL CITIES • STOCKS: CHICAGO (6) • LOS ANGELES (15) • JOBBERS EVERYWHERE

**YOU'LL FIND THE  
TECUMSEH  
Chieftain  
EXHIBIT  
at BOOTH 710**

All-Industry REFRIGERATION and AIR-CONDITIONING EXPOSITION, Cleveland Public Auditorium, October 29—November 1



Here's a "show" you can't afford to miss... the first All-Industry Exposition in years. And you can't miss the Tecumseh "Chieftain" exhibit, either. Booth 710... in the Arcade... right on your way from one main hall to the other. Stop by and see us, won't you. We're looking forward to your visit.



**TECUMSEH PRODUCTS CO.**  
TECUMSEH . . . . . MICHIGAN

"The World's largest independent producer of compressors and condensing units for the refrigeration industry..."



# Calling all REFRIGERATION Service Men

with the

## *Amazing-New* **THERMILITE**

A small compact warning signal that tells the customer to call **You** when he needs service.  
Sell your ad for a profit, and continue to profit, from the ad you sold.

Sales are made when service is needed. Make certain **You** get the **Call** and the **Sale** is yours.  
**Your** phone number appears instantly when the customer needs service. No conflicting advertising — no false calls.

Let Thermilite — Light the way to more profits, get the exclusive right to use Thermilite in your territory.  
Order direct from

### EASY TO INSTALL

Works on any refrigerator, ice cream cabinet or freezer. No troublesome wires to run. Has its own power supply. Adjustable to any desired temperature.

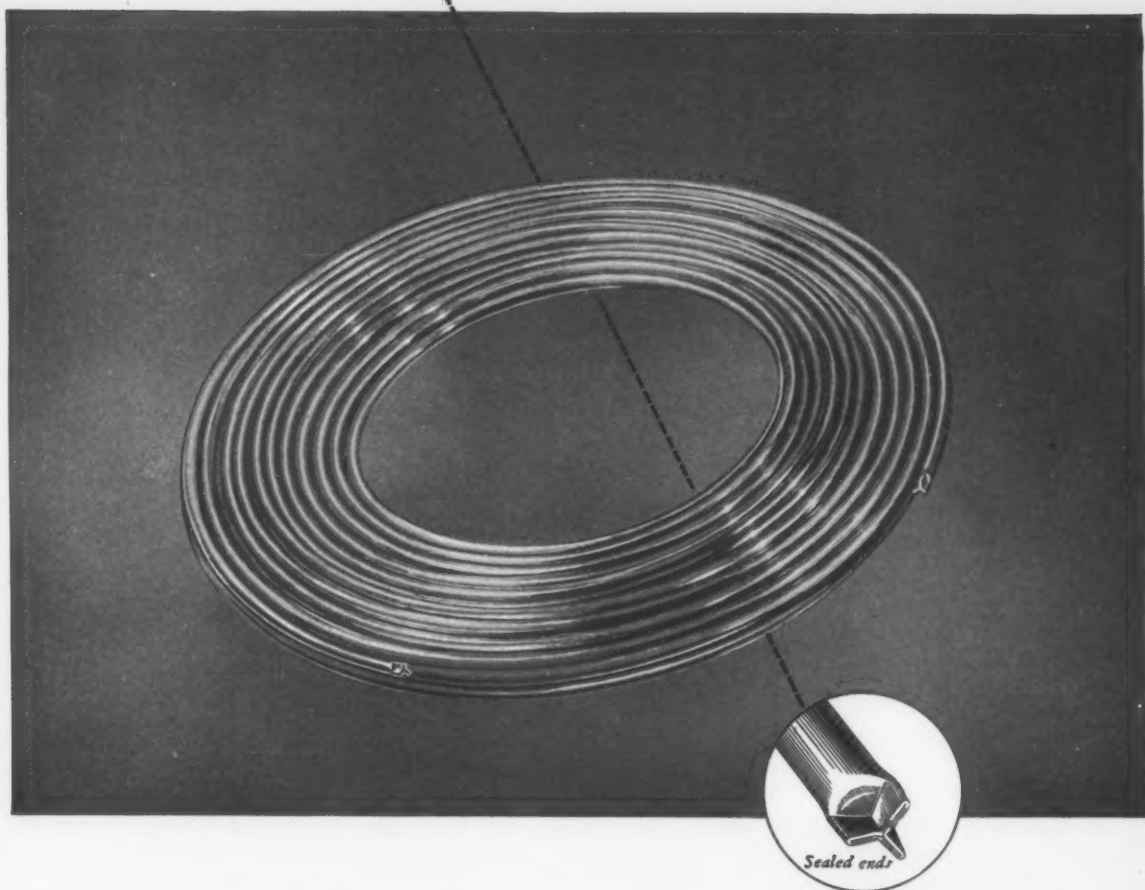


**TEMPERATURE** *Control Devices* **INC.**

NEW HAVEN 15, CONNECTICUT



**Sealed ends are your protection**



## REVERE DRYSEAL TUBE

**T**HE carefully sealed ends of Revere Dryseal Copper Refrigeration Tube *keep moisture out*. With a dehydrated, bone-dry interior, this tube guards the system against unwanted moisture, preventing one of the commonest causes of "stuck" expansion valves. That is why Revere's special seal is your protection against needless trouble.

Made for refrigeration, air conditioning, heat control, bottled gas and other exacting services, Revere Dryseal Tube is 99.9+% pure copper and is dead soft for easy working. It

comes in sizes from  $\frac{1}{8}$ " to  $\frac{3}{4}$ " O.D., with .035" wall, and is standard in 50-foot coils. Sold by Revere Distributors in all parts of the country.

### **REVERE**

**COPPER AND BRASS INCORPORATED**

*Founded by Paul Revere in 1801*

230 Park Avenue, New York 17, New York

*Mills: Baltimore, Md.; Chicago, Ill.; Detroit, Mich.;  
New Bedford, Mass.; Rome, N. Y.*

*Sales Offices in Principal Cities, Distributors Everywhere.*

• • •

Listen to *Exploring the Unknown* on the Mutual Network every Sunday evening, 9 to 9:30 p. m., EST.





**JOB  
PROVED**

*More than* **ALL OTHERS COMBINED**

## **SUN REFRIGERATION OILS . . .**

**Are Used by Experienced Service Men Because They're Custom-built for the Industry.**

Why do so many service men use Sun oils exclusively?

**Because Sun research men** set out a few years ago to develop a new type of oil to overcome the special conditions in refrigeration equipment. Because, today, more Sun refrigeration oils are used by equipment manufacturers than *all other brands combined*. Because Sun refrigeration oils give maximum performance and long, trouble-free operation.

**Custom-built for the industry**, these oils have extremely low pour points. They do not deposit hard wax. They resist oxidation and the tendency of ordinary oils to break down into sludge.

**Most important of all**, Sun's refrigeration oils have high resistance to chemical reaction with Freon and other modern types of refrigerant.

**See your Sun jobber** for the "Job-Proved" oils you need. Six different types with viscosities from 75 to 800 seconds at 100°F. Write or telephone your nearest Sun representative.

**SUN OIL COMPANY • Philadelphia 3, Pa.**  
*Sponsors of the Sunoco News-Voice of the Air — Lowell Thomas*

**SUN**  
**SUNOCO**

**INDUSTRIAL  
PRODUCTS**



*Stop in and rest at the*  
CORDLEY GARDEN

BOOTH No. 1004  
ALL-INDUSTRY EXHIBIT

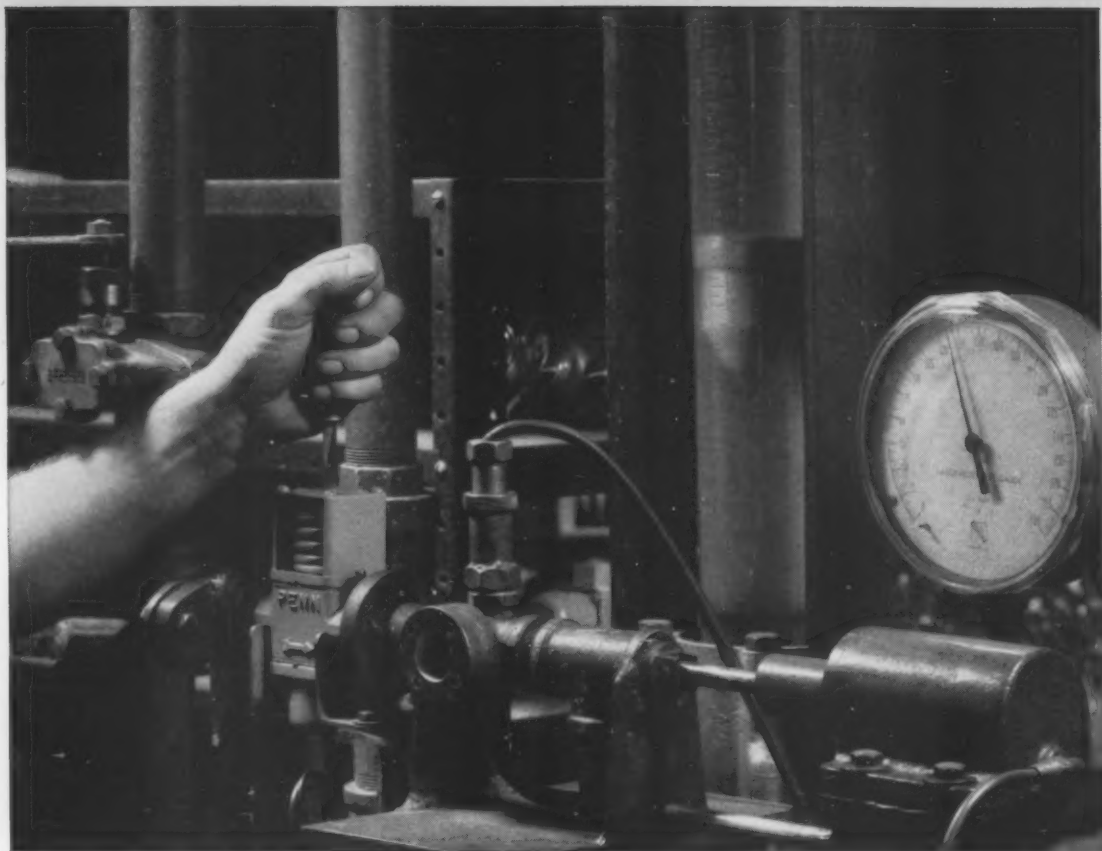
● This is your invitation to what we hope will be one of the most inviting displays at the All-Industry Convention in Cleveland.

In a natural garden setting you will find plenty of room to sit down and relax . . . plenty of perfectly cooled water served as only Cordley Electric Water Coolers can serve it . . . and a preview of the newest offerings by one of the oldest water cooler manufacturers.



**CORDLEY AND HAYES**

443 FOURTH AVENUE, NEW YORK 16, N. Y .



## Only **ONE SIDE** to this story!

It has to be "right"! There's no compromise in the testing of this water valve or any other PENN Refrigeration Control. They must adhere to rigid specifications or be rejected.

Here, for example, this inspector, one of the many experts in Quality Control and inspection in PENN'S modern factory, measures the flow of water through a PENN Water Valve. He uses an accurate flow meter, and he adjusts the opening point of the valve to meet *exactly* the customer's specifications. So

you see PENN experts never accept the "other" side of the story. They insist on PENN products being *right*. It is your assurance of the *best automatic refrigeration controls that can be built*. PENN Controls are built for temperatures as low as  $-150^{\circ}\text{F.}$ , and for pressures

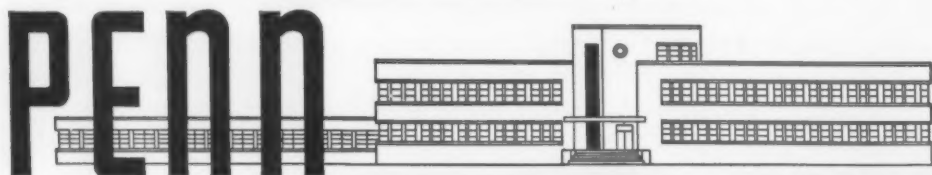
as low as 28" vacuum. Ask your jobber about them. *You pay no premium for Penn's extra value.*

*Penn Electric Switch Co., Goshen, Ind. Export Division: 13 East 40th Street, New York 16, U.S.A. In Canada: Penn Controls, Ltd., Toronto, Ont.*

See What's New In  
Refrigeration & Air Conditioning Controls  
Visit Penn Booth 125

At The  
All-Industry Refrigeration and  
Air Conditioning Exhibition  
In Cleveland

October 29 to November 1 (Inclusive)



## AUTOMATIC CONTROLS

FOR HEATING, REFRIGERATION, AIR CONDITIONING, ENGINES, PUMPS AND AIR COMPRESSORS

# See you in Cleveland!

*A Word of Welcome to the  
Fourth All-Industry Refrigeration and Air Conditioning Exposition  
Cleveland Public Auditorium, Oct. 29 to Nov. 1*

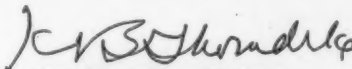
**A**S ALL-INDUSTRY SHOW time approaches—for the first time since 1941—we are proud to make this report in behalf of the mechanical refrigeration, air conditioning and frozen food equipment industry:

From every standpoint, the Fourth Exposition will be the largest in the industry's history. There will be 50 per cent more exhibitors than ever before. Displays will occupy three times as much floor area. Attendance will be far greater than that of previous shows. Interest throughout the trade—among the customers and prospects of the 200-odd manufacturers who will exhibit—is at an all-time peak.

With this assurance of success, we welcome you to Cleveland for the four days beginning October 29. We give you every assurance that your visit will be worthwhile and profitable. When you look over the displays, you will realize why our industry is called the fastest growing major industry in the country.

The All-Industry Show Committee joins with the Refrigeration Equipment Manufacturers Association and the Frozen Food Locker Manufacturers and Suppliers Association in thanking every manufacturer, every association, every trade publication, and every individual in the industry for the assistance and cooperation that has made the Fourth Exposition so outstanding.

## ALL-INDUSTRY SHOW COMMITTEE



K. B. Thorndike, Chairman

L. A. DeMore

H. W. Jarrow

Gene Robers

R. Kennedy Hanson

R. R. Farquhar

# THE "WHO, WHERE AND WHAT" OF



K. B. Thorndike  
Show Chairman

**THE FOURTH** All-Industry Refrigeration and Air-Conditioning Exposition will be the largest, most diversified presentation of new equipment in the industry's history. We present on these pages a space-by-space listing of exhibitors, the products each will display, and the company executives and representatives who will be in attendance during the Show period. Listings are as complete as possible; some eleventh-hour exhibitors could not be included except by name and space number. All early exhibitors were queried; those not listed did not reply.



R. K. Hanson  
Show Manager

## ACE ICE CREAM CABINET CO. SPACE 501

**WHAT** products will be shown—  
Cold plates; home and farm freezers; ice cream cabinet; soda fountain.

**WHO** will be there—  
Alex Unger, owner; N. S. Bloomenstein, sales manager; Harry Adler, advertising executive; Edward Buckenham, engineer; Irving H. Cutler, purchasing agent; Roger Cutler, traffic manager; Edward I. Stern, production manager.

## ACME INDUSTRIES, INC. SPACE 314

**NEW** products to be introduced—  
Oil separators.

**WHAT** products will be shown—  
Direct expansion shell and tube chiller; evaporative condenser.

**WHO** will be there—  
E. B. Dunphy, sales manager; K. A. Weatherwax, vice president and general manager; J. T. Moloney, sales engineer.

## AIRTEMP DIVISION, CHRYSLER CORP. SPACE 404, 406, 408 & 410



A. F. Ward



H. A. Malcom

**WHAT** products will be shown—  
3-hp packaged air conditioner; 5-hp packaged air conditioner (in operation);

residential year-around air conditioner; PL300 liquid cooler; water cooler; beverage cooler; milk cooler; reach-in refrigerator.

**WHO** will be there—  
D. W. Russell, president; H. A. Malcom, vice president and general sales manager; J. J. Donovan, assistant general sales manager; M. T. Bard, director of commercial refrigeration; A. F. Ward, director of packaged air conditioning.

## ALCO VALVE CO. SPACE 914



J. E. Dube



Roger Kipp

**NEW** products to be introduced—  
"Thermo-Limit" thermostatic expansion valve.

**WHAT** products will be shown—  
Thermostatic expansion valves; solenoid valves; evaporator pressure regulators; float valves and float switches.

**WHO** will be there—  
John E. Dube, vice president and general manager; Charles B. Lockwood, vice president and assistant general manager; Roger P. Kipp, sales manager; Arley L. Baker, assistant sales manager; Franklin M. MacDougall, chief engineer; C. F. Cooley, advertising manager; August Ulbert, eastern manager; John A. Schenk, Chicago branch manager; D. Hanson Grubb, Charles W. Chidester, and Mason Emanuels, Pacific coast representatives; Cecil R. Davis, Canadian representative; and the following field engineers: Leo J. Freitas, Dallas; Leonard K. Wright,

Jr., Knoxville; George J. Boepple, Philadelphia; Hugo C. Smith, Cleveland; Richard N. Meyer, St. Louis.

## AIRCRAFT SERVICE CO. SPACE 319

**WHAT** products will be shown—  
Service starter and analyzer for both hermetic and open-type units up to 1/2 hp; "3-weight" holder for indicating refrigerant charge and eliminating tank-holding hazard; thermostat tester for analyzing defects without removing the control.

## ALL-AMERICAN MEAT & BONE CUTTER CO. SPACE 1202

**WHAT** products will be shown—  
Floor and table model power saws for meat, fish, and bone.

**WHO** will be there—  
Carl R. Hospers, president; Max M. Shaw, vice president; John O. Best, secretary and general sales manager.

**SPECIAL** activities planned—  
Meat cutting demonstration.

## ALL-STEEL EQUIPMENT, INC. SPACE 315

**WHAT** products will be shown—  
"Froz-n-Food" lockers; key cabinets.

**WHO** will be there—  
A. L. Schoeberlein assistant sales manager; J. H. Hartman, field manager, equipment division.

## AMANA SOCIETY, REFRIGERATION DIVISION SPACE 505

**NEW** products to be introduced—  
Model 90 home freezer, 10 cu.ft. chest type.

**WHAT** products will be shown—  
Model 50 home freezer, 5 cu.ft. chest



# THE FOURTH ALL-INDUSTRY SHOW

type; Model 30R home freezer, 30-cu.ft. upright type; Model 200 combination freezer-cooler.

WHO will be there—

Geo. C. Foerstner, general manager; E. L. Hinchliff, regional sales manager; C. R. Telander, regional sales manager; R. K. Thorpe, sales engineer.

## AMERICAN BRASS CO.

SPACE 609

NEW products to be introduced—  
A new type charging hose.

WHAT products will be shown—

Small diameter dehydrated copper refrigeration tubes; capillary and restriction tubes; thermal expansion tubes; specially shaped grid coils; vibration eliminators; refrigeration tubing conduit; seamless flexible tubing; copper water tubes; wrought copper fittings; Anaconda 85 Red Brass pipe; condenser tubes.

WHO will be there—

M. B. Allan, manager, French Small Tube Branch; C. E. Woodward, assistant manager, American Metal Hose Branch; W. C. Knoepfel, manager, Cleveland district; W. H. Dowd, exhibit manager.

## AMERICAN COILS CO.

SPACE 911



T. W. Binder



M. Parcaro

NEW products to be introduced—

Display case "Food Conditioner"; central system duct type "Comfortaire" conditioner; store model "Comfortaire" conditioner; overhead type cooling unit.

WHAT products will be shown—

Deluxe and utility model "Food Conditioners"; open face cooling unit; down-draft utility cooling unit; reach in panel cooling unit; two-way ceiling mounted cooling unit; "Zero Breeze" low temp unit with automatic electric defrost.

WHO will be there—

T. W. Binder, president; M. Parcaro, executive general manager; H. A. Thibault, sales manager; H. Rackin, export manager; John Rasmussen, chief engineer; and the following factory representatives: H. C. Moore, C. W. Champe, J. A. Denholm Jr., J. York Feitel, Wm. D. Keefe, M. H. McTurk, John J. Madden, A. J. Nelson, J. E. Oliphant, L. D. Greenwood, L. V. Russell.

## AMERICAN FLANGE & MFG. CO.

SPACE 119

NEW products to be introduced—

Positive vapor barrier construction with "Ferro-Therm" insulation.

WHAT products will be shown—

"Ferro-Therm" steel insulation for all types of frozen food storage and processing equipment.

## AMERICAN INJECTOR CO.

SPACE 126



Ed Kellie

WHAT products will be shown—

Oil separators; high side floats; constant pressure valves; starting load regulating valves; snap action valves; water valves; check valves; filters; dehydrators.

WHO will be there—

Edward Kellie, vice president; John L. Trix, secretary; Geo. I. Boone and Geo. B. Boone, eastern agents; J. C. Battles, midwest agent; Wm. H. Cody and Allen L. Cody, southwest agents; Van D. Clothier, west coast agent; J. D. Ross, Canadian representative.

## AMERICAN REFRIGERATOR & MACHINE, INC.

SPACE 711

NEW products to be introduced—

1947 Model AR-8 freezer.

WHAT products will be shown—

Home, farm, and commercial freezers; "Arid-Air" bottle coolers; display cases with visual glass sliding doors.

WHO will be there—

R. W. Dreher, president; J. V. Hartman, assistant sales manager; E. H. White, chief engineer; R. E. Yale and M. Knoll, engineering department.

## AMERICAN SOCIETY OF REFRIGERATING ENGINEERS

SPACE 608-A

## ANSUL CHEMICAL CO.

SPACE 713

WHAT products will be shown—

Sulphur dioxide and methyl chloride.

WHO will be there—

H. V. Higley, president; F. J. Hood, vice president; R. C. Hood, secretary; L. C. McKesson, sales director; G. B.

Vermilye, sales manager, refrigeration division; L. T. Plouff, assistant sales manager, refrigeration division; W. O. Walker, director of research; R. C. Mc-



F. J. Hood



H. V. Higley



L. C. McKesson

Neely, advertising manager; F. W. Wedge, eastern manager; R. F. Polley, F. M. Duvall, Joe Moore, H. W. Gullatt, and L. V. Russell, district managers; K. B. Covert, Nelson Port, T. R. Kearney, and H. Dill, salesmen; E. Billings; W. Rinelli.

SPECIAL activities planned—

Sales meeting of the Refrigeration Division at 2 p.m. Sunday, October 27. This meeting is for field men only, not distributors.

## ARCADE MFG. DIVISION, ROCKWELL MFG. CO.

SPACE 1216

WHAT products will be shown—

Cold storage door locks and hinges; "Super Freezer" locks and hinges; track door operators; vestibule hinges; bumper bars; door closers; service door locks and hinges; quick freezer locks and hinges; milk cabinet lock.

WHO will be there—

A. J. Kerr, vice president and sales manager; I. P. Gassman, division sales manager; Mentor Wheat, Lawrence Bordner, and Loyal P. Gassman, sales department.

## ARMSTRONG CORK CO.

SPACE 906

WHAT products will be shown—

Corkboard; mineral wool board; "Foam-glas"; insulation construction details; special and conventional types of locker construction.

# WHO — WHERE — WHAT

## WHO will be there—

H. B. Wentz, Cleveland district manager; V. W. Adams and A. D. Kline, Cleveland salesmen; R. B. Breneman, Columbus, Ohio, branch manager; G. S. Mann, manager, contract operations, industrial insulation department.

## AUTOMATIC PRODUCTS CO. SPACE 223 & 225



Earl Vallee

## WHAT products will be shown—

Thermostatic expansion valves; automatic expansion valves; driers, filters, strainers.

## WHO will be there—

R. W. Johnson, president; E. A. Vallee, vice president; A. L. Topp, laboratory manager; V. Pawelsky, chief engineer; Del Moerick, refrigeration sales; all field representatives.

## BAKER ICE MACHINE CO., INC. SPACE 506



Sterling Smith



Ross Rathbun

## NEW products to be introduced—

Model F82 compressor, a 4-cylinder 6 x 5½ unit which is the first model of a completely new compressor series.

## WHO will be there—

Ross Rathbun, president; Sterling F. Smith, general sales manager; Roger Sprague, assistant general sales manager.

## BIRO MFG. CO. SPACE 919

## WHAT products will be shown—

Electric meat, fish, and bone cutters.

## WHO will be there—

Carl Biro Sr., president; Carl Biro Jr., general manager; Vincent Biro, assistant general manager; J. W. Witte, sales man-

ager; Glen Ransey, assistant sales manager; Paul Biro, Cleveland agent.

## R. H. BISHOP CO. SPACE 103



C. H. Bowman

## NEW products to be introduced—

"Atticvane" fans in 30, 36, and 42-inch sizes.

## WHAT products will be shown—

Food freezer for home and farm use.

## WHO will be there—

Charles H. Bowman, sales manager; Charles B. Younger, division sales manager; R. E. Brigham, service engineer.

## BLACK, SIVALLS & BRYSON, INC. SPACE 108

## WHAT products will be shown—

Pressure relief devices.

## WHO will be there—

C. E. Huff, sales manager; Jim Myers, assistant sales manager; E. V. White, Ohio representative.

## BONNEY FORGE & TOOL WORKS SPACE 1010

## WHAT products will be shown—

Refrigeration hand tool sets and regular line of mechanics hand tool sets for refrigeration service.

## WHO will be there—

C. D. Otterson, sales manager; F. S. Durham Jr., assistant to the president.

## BOSTON TECHNICAL INSTITUTE SPACE 119

## WHO will be there—

Paul D. Ratzburg, president-treasurer; A. Ratzburg, vice president and secretary; L. H. Morgan, supervisor of laboratories; Raymond Nathanson, registrar and veteran counselor; H. E. Russell, director of education; M. Summersgill, office manager; A. B. Warren, clerk of corporation.

## BRIDGEPORT THERMOSTAT CO., INC. SPACE 307

## WHAT products will be shown—

Metallic bellows, bellows assemblies, and

bellows shaft seal assemblies.

## WHO will be there—

J. F. Mayne, assistant sales manager; C. F. Ahlheim and J. A. Kinnard, sales engineers.

## EARLE E. BROWN ORGANIZATION SPACE 1006

## WHAT products will be shown—

Self service equipment for locker plants, including ladders, carriages, baskets, and freezer trucks.

## WHO will be there—

Harold Feldstein, engineer; Jerome Michaelson, salesman.

## BROWN ELECTRIC CO. SPACE 207

## "full dress parade of the industry's products . . ."

The fourth All-Industry Exposition, since before the war, will give members of the National Association of Refrigeration Contractors a "full dress parade" of the industry's new and improved products and applications in the entire field of refrigeration.

Attendance will bring you up-to-date with the industry, kindle your interest and enthusiasm, and give you practical profit-making ideas.

What does the future in this business hold for you? What are the trends in production and distribution? How can you interpret and "cash-in" on those trends? What new products and service ideas might be worth considering? What good practical ideas might you pick up from other refrigeration contractors?

Answers to those questions and more will be on tap at this All-Industry Exposition and NARC's annual meeting.

Gerald W. Weston  
Acting Executive  
Vice President

## BRUNNER MFG. CO. SPACE 321 & 323

## WHAT products will be shown—

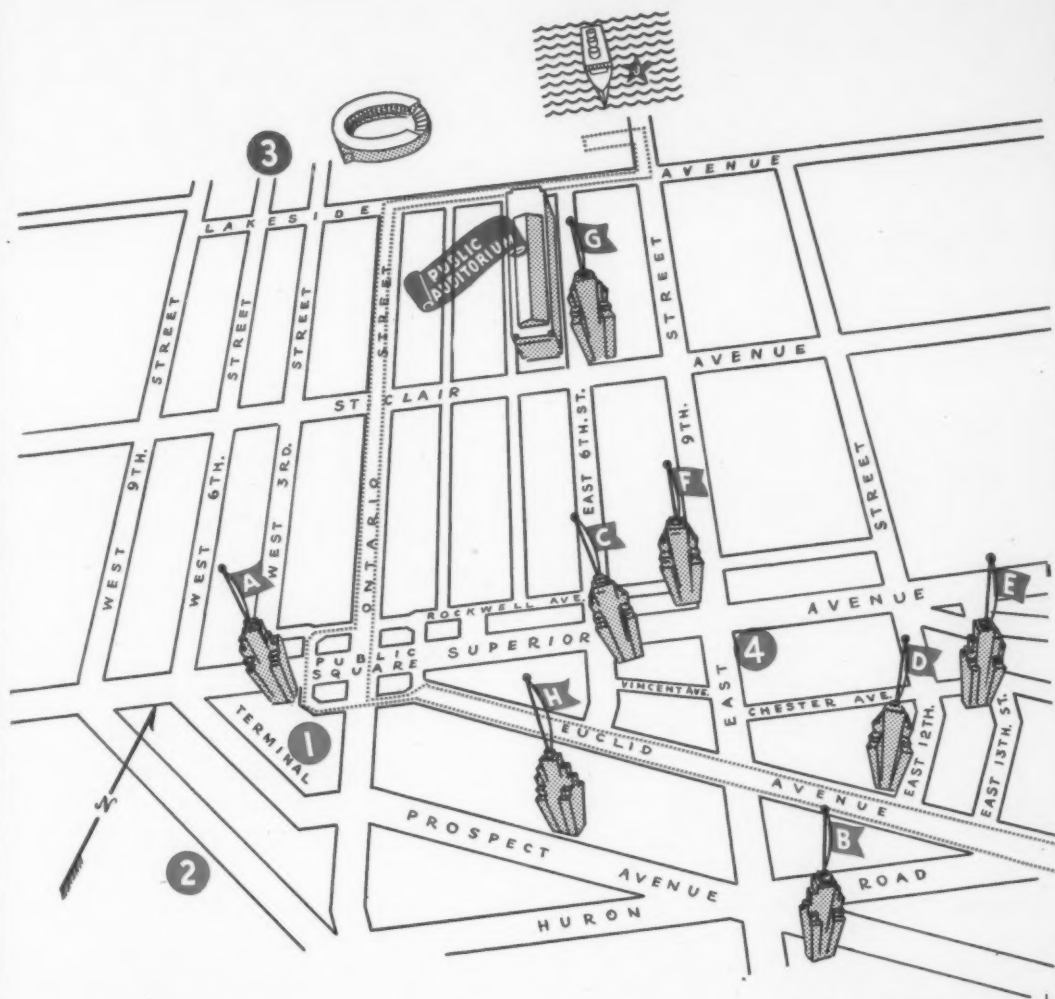
Refrigeration condensing units.

## WHO will be there—

G. L. Brunner Sr., chairman of board; G. L. Brunner Jr., president; A. G. Zumbun, executive vice president and general manager; J. W. Thomas, general

## THE REFRIGERATION INDUSTRY

# A SHOW VISITOR'S GUIDE to downtown Cleveland



## DOWNTOWN HOTELS

- A—Cleveland (REMA)
- B—Carter (FFLMSA)
- C—Hollenden (RSES)
- D—Statler (REWA)
- E—Allerton (NARC and NFFLA)
- F—Olmsted
- G—Auditorium
- H—Colonial

## NO "SHOW BOAT"

A last-minute report from an official of the D&C Navigation Co. states that plans of the National Frozen Food Locker Association to charter a Great Lakes passenger steamer docked at Cleveland in order to provide additional "hotel" facilities have been canceled. Both Show officials and Cleveland Housing Bureau heads assert, however, that there will be plenty of housing space for all those who come to the Show.

## TRANSPORTATION TERMINALS

- 1—Union Terminal
- 2—Erie Station
- 3—Pennsylvania Station
- 4—Bus Terminal
- J—East Ninth Street Pier

....Dotted line indicates route of loop bus line "B" linking the Public Auditorium with most of the downtown hotels.

# THE "WHO, WHERE AND WHAT" OF

sales manager; O. R. McDonald, sales promotion and advertising manager; S. R. Hirsch, chief engineer; P. A. Karl, export manager; H. S. Ormsbee, assistant export manager; J. P. Junkin, F. G. Slagel, F. M. Carryl, G. N. Knowles, L. A. De Marsh, F. E. Wilson, T. J. Lyon, C. E. Burlingame, J. R. Reid, J. B. Fleming, W. M. Cashin, R. C. Smith, and G. W. Mathews, field representatives.

## THE BRUNSWICK-BALKE-COLLENDER CO. SPACE 904

NEW products to be introduced—

Model RD "Blue Flash" frozen food storage refrigerator, 9½ cu. ft.; Model TD "Blue Flash" frozen food storage refrigerator, 17-½ cu. ft.; Model T "Blue Flash" table-top food and beverage refrigerator, 25-¾ cu. ft.

WHAT products will be shown—

Model R "Blue Flash" table-top food and beverage refrigerator, 15.4 cu. ft.

WHO will be there—

R. W. Jackson, vice president; H. D. Graves, district sales representative; M. P. Penn, refrigeration engineer.

## BUNDY TUBING CO. SPACE 407

WHAT products will be shown—

Samples of various tubing parts used in the refrigeration industry, and a display board with samples and description of the process used in the manufacture of "Bundyweld" steel tubing.

WHO will be there—

G. D. Baker, vice president and director of sales; P. A. O'Connell, sales manager; J. A. Dugan and H. L. Millett, sales department.

## B. H. BUNN CO. SPACE 1119-B

## BUSH MFG. CO. SPACE 610



E. M. Flannery

NEW products to be introduced—  
Aluminum plate coils, and an auto-defrost device for low temperature units.

WHAT products will be shown—

Air conditioning coil; evaporator coils; various unit coolers.

WHO will be there—

J. W. Hatch, president; E. M. Flannery, vice president; C. A. MacArthur, sales manager; W. Schaller, Jr., assistant sales manager; John Brooks, sales department; H. P. Peterson, chief engineer; A. Houle, chief draftsman.

## BUSINESS NEWS PUBLISHING CO. SPACE 507

## BUTCHER BOY COLD STORAGE DOOR CO. SPACE 113

WHAT products will be shown—

Cold storage doors; hardware, including "Super-Seal" fasteners and "Finger-Tip" openers.

WHO will be there—

George W. Slopa, president; Robert E. Slopa, sales engineer.

## D. R. CARD CO. SPACE 105

## CARRIER CORP. SPACE 1109 & 1111



Mark Mooney

WHAT products will be shown—

Reciprocating compressors, cold diffusers, and self-contained room air conditioners.

## CENTURY ELECTRIC CO. SPACE 703

WHAT products will be shown—

Open motors; splash-proof motors; totally-enclosed fan cooled motors; explosion-proof motors.

WHO will be there—

From St. Louis: J. L. Woodress, director of sales; E. S. Moore, general sales manager; George C. Henderson, assistant general sales manager; Anthony Neher, sales promotion manager; Oliver S. Imes, advertising manager; Robert Englich, publicity department. From Cleveland: Warren H. Moore, assistant director sales manager; I. S. Adelberg, regional sales manager.

## CHICAGO SEAL CO. SPACE 502



Willis Stafford



Herman Goldberg

WHAT products will be shown—

Full line of replacement seals and valve plates, including catalogs and working models.

WHO will be there—

Herman Goldberg; Willis Stafford; Dwight Orr; Russell E. Cook; Felix Wierman.

## CLEVELAND REFRIGERATOR CO. SPACE 913

WHAT products will be shown—

"Norse King" walk-in storage coolers, freezer, refrigerated display case; "National" beverage cooler, salad unit.

WHO will be there—

Wm. Drosd, president; A. J. Litt, treasurer; Chas. Demetry, superintendent; Edw. Smith, engineer; Sam Litt, sales.

## CONTAINER CORP. OF AMERICA SPACE 325

WHAT products will be shown—

"Vapocan" frozen food containers; "Freezer Pak" frozen food box and bag unit; "Vapo Seal Wrap" cartons; "Concora Vegetable Dry Pak" cartons; "Concora Ground Meat Pak" cartons.

WHO will be there—

W. D. Kellogg, assistant sales manager, paraffine carton sales division; W. J. Poole, W. H. K. Bennett, C. W. Frese, packaging engineers.

## THE COOLSTREAM CORP. SPACE 303



L. L. Berken

## THE REFRIGERATION INDUSTRY



# THE FOURTH ALL-INDUSTRY SHOW

WHAT products will be shown—  
Electric water coolers.

WHO will be there—  
Lyonel L. Berken, president and sales manager; Bernard Leventhal, chief engineer and treasurer; James J. Corey, consultant and designing engineer.

## COPELAND REFRIGERATION CORP. SPACE 707

WHAT products will be shown—  
Conventional condensing units; "Copelematic" condensing units; electric water coolers; electric refrigerators.

WHO will be there—  
H. E. Thompson, president; F. J. Gleason, vice president and treasurer; C. L. Curtis, vice president; O. H. Buschmann, vice president and chief engineer; W. G. Von Meyer, sales manager; R. G. Berg, assistant sales manager; G. L. Hickey, New York representative; Bert Kaple, southeastern representative; William Galvin, northeastern representative; George Chandler, Philadelphia representative.

## CORDLEY & HAYES SPACE 1004



C. M. Cordley

WHAT products will be shown—  
Self-contained electric water coolers.

WHO will be there—  
C. M. Cordley, president; W. J. Mays, secretary-treasurer; C. A. Harris and L. B. Kelley, district managers.

## CORNELIUS CO. SPACE 205

## CURTIS REFRIGERATING MACHINE DIVISION, SPACE 212 & 214

WHAT products will be shown—  
Commercial condensing units of 1½, 5, and 10 hp; 5-ton packaged air conditioning unit; special operating display showing patented method of lubrication.

WHO will be there—  
E. H. Steedman, chairman of the board; H. C. Morrison, division manager; H. J. Nettler, assistant sales manager; J. P. Gilbert, advertising manager; N. H. Beh-



H. C. Morrison

rend, M. C. Jones, and Wm. Cawley, sales engineers; H. K. Hecker, design engineer, new products; K. T. Rockey, manager, New York office.

## CUSHMAN & DENISON MFG. CO. SPACE 308

WHAT products will be shown—  
"Flo-Master Fountainbrush" sets for marking frozen food packages; key cabinets; key racks; key tags.

WHO will be there—  
Robert E. Wright, Sr., sales promotion manager; Robert E. Gooley, general manager; Richard Murphy.

## CUTLER-HAMMER, INC. SPACE 304 & 306

WHAT products will be shown—  
Complete line of temperature and pressure controls for domestic, semi-commercial and commercial refrigeration applications; refrigeration accessories; air conditioning controls.

WHO will be there—  
P. S. Jones, vice president in charge of sales; R. M. Van Vleet, manager, refrigeration sales; W. R. Reinhold, assistant manager, refrigeration sales; A. R. Johnson, manager, merchandising sales; L. P. Niessen, advertising manager; C. L. Wymelberg, advertising department; R. J. Eckstein, J. P. Simon, district sales managers; W. E. Leffingwell, sales service department; W. Stark, sales representative; E. A. Clark, M. Duglass, R. A. Volbrecht, J. E. McSorley, A. M. Wolf, C. W. Greenman, and H. H. Ratcliff, sales engineers.

## DAVISON CHEMICAL CORP. SPACE 208 & 210

WHAT products will be shown—  
Refrigeration grade silica gel.

## DAY & NIGHT MFG. CO. SPACE 312

WHAT products will be shown—  
Self-contained drinking fountains; self-contained restaurant water cooler; "Flash

Kold" evaporator plates; normal suction pressure and high suction pressure insulated tank coolers.



J. W. Rubenson

WHO will be there—  
J. W. Rubenson, manager, refrigeration division.

## DAYTON RUBBER MFG. CO. SPACE 425

WHAT products will be shown—  
"Thorobred" V-belts; fractional horsepower V-belts.

WHO will be there—  
W. J. Michel, Dayton district manager; K. L. Bohler, Cleveland district manager.

## "time-saving means of establishing contacts..."

The entire membership of the Refrigeration Equipment Wholesalers Association looks forward to the opening of the 4th All-Industry Exposition in Cleveland.

This is the first opportunity our members have had to see the many new post-war products and to discuss delivery and other existing problems with the various manufacturers, at one time, under one roof. Wholesalers look forward to this exposition as a time-saving means of establishing many contacts and securing new lines for the big post-war years ahead.

The preview of new products should, in itself, be very educational and helpful to our wholesalers in setting up their future sales programs.

H. S. McCloud  
Executive Secretary

## DETROIT LUBRICATOR CO. SPACE 503 & 603

NEW products to be introduced—  
Model No. 573 thermostatic expansion valve, a smaller version of the Model No. 673 valve.

WHAT products will be shown—  
Automatic and thermostatic expansion valves; solenoid valves; pressure and



# WHO — WHERE — WHAT

temperature controls for use with low pressure refrigerants.

WHO will be there—

C. H. Hodges, Jr., president; E. J. Doucet, vice president and general sales manager; G. E. Cage, vice president; K. B. Thorndike, vice president; F. G. Coggin,



E. C. Doucet



Ted Coggin

manager, refrigeration division; F. Y. Carter, chief sales engineer, refrigeration division; and J. M. Strauss, T. C. McKee, R. L. Stephens, L. O. Grauer, W. A. Edwards, T. H. Hart, M. M. Rivard, J. F. Page, D. J. Gott, E. J. O'Connell, W. D. Knox, H. L. Walker.



## DOLE REFRIGERATING CO. SPACE 605

WHAT products will be shown—  
Standard overhead storage room banks; freezer plates.

WHO will be there—

Sales and administrative personnel, including C. C. Ryan; L. A. Sebastian; Harold Hansen; A. B. Brady; A. W. Monroe; J. A. Wilkerson; L. A. DeMore; E. C. Wilbur; Bruce B. Tweed; C. H. Boyd.

## DOUGHBOY INDUSTRIES, INC. SPACE 1110

WHAT products will be shown—  
Self-feeding heat sealing device.

WHO will be there—

Paul R. Ray; James K. Ford; Cal Humphrey.

## DRAYER-HANSON, INC. SPACE 403

NEW products to be introduced—

"Strata-Flo" self-contained, electric pressure-type water cooler with one-piece stainless steel top; self-contained evaporative condensing unit.

WHAT products will be shown—

"Airtopia" year-round reverse cycle, all electric, self-contained air conditioning unit; "Spasaver" and "Flocold" commercial coil line; "Flocold" water defrost; "Hot Shot" electrical defrost; "Wat-R-Miser" evaporative condensers; direct expansion, steam and water air conditioning coils; "Flocold, Sr." floor product coolers; "Turbo-Flo" industrial water cooling equipment.

WHO will be there—

J. G. Lombardi, vice president; C. J. Lyall, general sales manager; H. M. Crusey, sales engineer.

SPECIAL activities planned—

Prize drawing for naming of new self-contained evaporative condensing unit.

## E. I. DU PONT DE NEMOURS & CO., INC., AMMONIA DEPT. SPACE 418 & 420

WHO will be there—

L. G. Seebach, assistant sales manager; R. A. Ballman, New York branch office manager; A. W. Finke, St. Louis branch office manager; C. J. Courtney, Philadelphia branch office assistant manager; W. T. Beck, Chicago branch office assistant manager.

## THE EBCO MFG. CO. SPACE 201



L. C. Love

WHAT products will be shown—

"Oasis" electric water coolers, Model OP-10, Model OP-20B and Model OB-4; No. C-500 glass filler; No. C-550 glass filler; No. V-225 wall fountain; No. C-250-N bracket fountain.

WHO will be there—

A. R. Benua, general manager; L. C. Love, general sales manager; W. L. Winchester, assistant sales manager; R. H. Orthofer, chief engineer; R. S. Graham, R. D. Gray, L. J. Freitas, R. L. Coon,

and John P. Rainbault, district sales managers.

SPECIAL activities planned—

Continuous running conference of sales personnel.

## ELECTRIC GLASS CO. SPACE 1119-A

NEW products to be introduced—

"Zerostat" automatic temperature alarm; simplified, sealed-in-glass bi-metallic thermostat; adjustable sealed-in-glass mercurial thermostat.

WHO will be there—

John F. McAllister, owner; James McCrea, Jr., sales manager; John Lightfoot, representative.

## ELECTRIC POWER EQUIPMENT CORP. SPACE 1007



C. R. Logan



M. E. Miller

WHAT products will be shown—

High sides; low sides; flow controls; heat exchangers; condensers; ice cube makers; air conditioning units; "Thermek" transfer surface.

WHO will be there—

M. E. Miller, president; C. R. Logan, vice president; R. H. Shanaman, treasurer; W. E. Ural, chief engineer; R. G. Regester, advertising manager; Al Dattle, procurement; H. F. Krantz, engineer; S. C. Moncher, New York representative; M. J. Meiklejohn, New England representative.

## ELECTRIMATIC DIVISION, SIMONIZ CO. SPACE 1015

NEW products to be introduced—

Models SL and SP solenoid valves; dehydrators; flare fittings.

WHAT products will be shown—

Water regulating valves; solenoid valves.

WHO will be there—

H. L. Beekley, vice president and general manager; M. B. Madden, sales manager; R. A. Lacart, sales engineer.

## ENRICHMENT PRODUCTS CO. SPACE 1218

WHAT products will be shown—

"Flav-R-Save", an ascorbic acid product used to prevent browning of peaches and other fruits.

WHO will be there—

Roy Dodson, managing director.

THE REFRIGERATION INDUSTRY



Every Weber Roll-A-Door is fully protected by U.S. Patents Nos. 2,238,511 and 2,276,635.

## PROVIDES ZERO TEMPERATURE PROTECTION

In order to maintain that original "Garden Freshness"—proper flavor and health-building qualities—frozen foods must be kept at zero temperature. Higher temperatures or many variations in temperature means a loss in quality—loss of customer satisfaction and a diminishing of sales and profits.

WEBER ROLL-A-DOOR CABINETS with their "engineered utility" provide positive zero temperature protection—plus greater merchandise accessibility. Designed on a proved refrigeration principle—constructed with superior insulation completely sealed within a heavy duty steel frame the Weber Roll-A-Door Frosted Food Cabinet insures the retention of zero temperature and minimizes variation from constant use.

**WEBER IS BETTER - BETTER WAIT FOR WEBER**

PLAN YOUR FUTURE WITH **WEBER** TIME-PROVED EQUIPMENT  
WEBER SHOWCASE & FIXTURE CO., INC., 5700 AVALON BLVD., LOS ANGELES 54, CALIF.  
LOS ANGELES • EL PASO

**PIONEERS IN FROZEN FOOD EQUIPMENT**

*Write us for the name of your nearest dealer.*

**ON  
DISPLAY**  
All Industry  
Refrigeration  
and  
Air Conditioning  
Exposition  
**CLEVELAND  
AUDITORIUM**  
Oct. 21 - Nov. 1





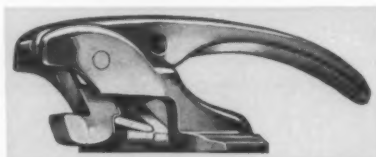
#### HOW IT WORKS



In this cutaway view, the handle has been pulled to open the door. This lowers the trigger (a), made in one piece with the lock (b). A metal plate (c) rests in a notch of the spring-actuated bolt (d) and keeps the trigger cocked.

#### HOW IT HOLDS

To trip the trigger, close the door. The bolt yields just enough to swing the plate past center. Now it exerts its power horizontally on the catch—a bulldog grip that never eases up.



## When it Trips ... it GRIPS

GRAND Rapids Brass Company presents the strongest, most positive automatic trip lock ever devised. Exclusive patented design permits fingertip operation. But once it's closed, there's constant pressure that assures an air-tight, heat-tight seal even against a worn gasket.

Materials and appearance meet the high standards you expect from this company. The

lever is forged brass on a stainless steel pin. The bolt is extruded brass, the casing of special zinc alloy diecast under hydraulic pressure. Finished in mirror-like chrome.

This lock is available for all commercial refrigeration applications in 3 sizes, with adjustable strikes that provide a wide range of offsets. Write for descriptive circular giving specifications and prices.

*Manufacturing a full line  
of hardware for  
commercial refrigeration*

# Grand Rapids Brass Company

Makers of Dependable Refrigerator Hardware for over 40 Years

*Grand Rapids 1, Michigan*

# WHO — WHERE — WHAT

## ESTON CHEMICALS, INC. SPACE 907

WHAT products will be shown—

Methyl chloride; sulfur dioxide; "Mul-T-Vapor" aerosol.

WHO will be there—

A. M. Esberg, president.

## FEDDERS-QUIGAN CORP. SPACE 1002

WHAT products will be shown—

Air cooled condensers; forced draft unit coolers.

### *"preparing for the challenge of tomorrow . . ."*

As the application of refrigeration equipment expands, the responsibilities of members of the Refrigeration Service Engineers Society will be increasingly important.

Today the refrigeration service engineer is a practical application engineer. His knowledge goes beyond the actual mechanics of changing or repairing a compressor, a valve, a fitting, or some other component part of the system.

He is learning about the technology of food and other considerations so important in the engineering, installation, maintenance, selling and servicing of refrigeration equipment. Frequently, his service calls may not be the fault of the equipment but rather its misapplication by the user.

Therefore, the service engineer, in preparing himself for the challenge of tomorrow, can secure firsthand information on the equipment he will be required to install and maintain by attending the All-Industry Refrigeration and Air Conditioning Show.

H. T. McDermott  
Secretary

## FLEETWOOD AIRFLOW, INC. SPACE 915

NEW products to be introduced—

Double duty meat case; steel walk-in cooler; beer dispenser; beverage cooler; "Plyotube" beer hose; reach-in refrigerator.

WHO will be there—

Louis L. Popky, president; Chas. S. Popky, vice president and treasurer; and the following members of the sales department: Geo. T. Latorney, Harvey B. Sherman, Gil Bernstein, Harry Kaiser.

## FOOD FREEZING SPACE 907-A

## FOOD LOCKER EQUIPMENT CO. SPACE 328

## FRIGIDAIRE DIVISION, GENERAL MOTORS CORP. SPACE 417 & 419

WHAT products will be shown—

FW-62K condensing unit; FW-6J condensing unit; AWF-5150 condensing unit; EC-2 evaporative condenser; CV-360 forced air coil; CO-620 forced air coil.

WHO will be there—

J. A. Smith, commercial sales division; J. B. Nahstoll, displays and exhibits.

## FROSTED FOOD FIELD SPACE 405

## FROZEN FOOD INDUSTRY & LOCKER PLANT JOURNAL SPACE 422

## FROZEN FOOD LOCKER MANUFACTURERS & SUPPLIERS ASSOCIATION SPACE 908

## GENERAL CONTROLS CO. SPACE 1122

WHAT products will be shown—

Expansion valves; solenoid valves; strainers; hydramotors; temperature controls; thermostats.

WHO will be there—

W. A. Ray, president and chief engineer; J. F. Ray, director of sales; J. M. Schlemmer, refrigeration divisional sales manager; E. P. Hollister, New York branch manager; George A. LeFevre, Philadelphia branch manager; W. F. Marsh, Boston branch manager; L. E. Wetzell, Cleveland branch manager; A. F. Read, Detroit branch manager; Roger W. Allen, Atlanta branch manager; Roger C. Allen, Kansas City branch manager; E. B. Maire, Chicago branch manager; C. C. Tischler, Pittsburgh branch manager; H. Matteson, refrigeration engineer; Paul Sagar, factory field representative.

## GENERAL ELECTRIC CO. SPACE 228, 411 & 413

WHAT products will be shown—

Alarm thermostat for frozen food units; solenoid valve.

WHO will be there—

Edward S. Bush, sales manager, appliance and aircraft section; Harry R. Crago, application engineer, appliance and aircraft section.

## GENERAL ENGINEERING & MFG. CO. SPACE 412

NEW products to be introduced—

Self-contained cabinet type air condi-

tioner, 5-ton capacity, with semi-hermetic two-stage compressor.

WHO will be there—

J. H. Schreiber, president and general manager; W. A. Schreiber, vice president; W. Vogel, vice president; E. Cygax, chief engineer; A. Huhn, engineer; R. L. Diehl, sales manager.

## L. H. GILMER CO. SPACE 1118

WHAT products will be shown—

V-belts.

WHO will be there—

John S. Krauss, manager; W. H. Lehr, sales manager; E. F. Wood, assistant sales manager; H. W. Weihenmayer, sales promotion manager; W. J. David, W. E. Mettler, N. R. Chapman, district managers; A. B. MacFarland, division manager.



"Pack a bag? What for?  
You're only going to be at the  
Show four days, aren't you?"

## GOODSELL CORP. SPACE 601

## GOODYEAR TIRE & RUBBER CO. SPACE 1209

WHAT products will be shown—

"Pliofilm" packaging material for frozen foods.

WHO will be there—

C. P. Joslyn, manager, chemical products division; A. F. Landefeld, manager, Pliofilm sales; A. B. Clunan, manager, Pliofilm packaging sales; F. E. Wilson, frozen food packaging specialist; Robert Kilgore and Robert Anderson, Pliofilm sales; J. H. Post, manager, Chicago district, Pliofilm sales; Dr. M. D. Coulter and Dr. James Snyder, Pliofilm packaging.



# WHO — WHERE — WHAT

ing research; Joseph Stalter, Pliofilm machine design; H. A. Polonus, public relations.

## GRAND RAPIDS BRASS CO. SPACE 1205

WHAT products will be shown—  
Commercial refrigerator hardware.

WHO will be there—

H. E. Pleasant, president; G. H. de Graaf, sales manager; W. B. Jones, assistant sales manager; O. M. Wenk, W. D. Keefe, J. J. Madden, E. B. Bradley, district representatives.

## GRIFFITH LABORATORIES SPACE 427

## W. A. HAMMOND DRIERITE CO. SPACE 415

WHAT products will be shown—  
"Drierite", a desiccant for drying refrigerants and industrial gases.

WHO will be there—

Dr. W. A. Hammond, proprietor; J. L. Ledeen, manager of engineering sales.

## THE HEAT-X-CHANGER CO., INC. SPACE 426

NEW products to be introduced—

Cast aluminum water cooling low sides; soda fountain liquid low sides; beverage and beer liquid low sides; suction to liquid heat exchangers; cafeteria and bakery and beverage water coolers.

WHO will be there—

Cecil Boling, president; Robert J. Alcorn, vice president.

## HENRY VALVE CO. SPACE 227



Dick Dawson



Guy Henry

WHAT products will be shown—

Packless and packed valves; strainers; dryers; accessories; solenoid valves; flow control devices; pressure regulating valves; special relief valves.

WHO will be there—

G. J. Henry, president; C. V. Gary, vice president; R. S. Dawson, vice president;

D. K. McIlvaine, vice president; G. W. Wilson, assistant sales manager; C. W. Hudzielt, eastern manager; C. C. Allen, N. Beals, E. A. Flesh, J. E. Law, H. F. Stamps, field engineers; C. H. Boyd, C. W. Chidester, T. Davenport, M. Emanuels, A. A. Ways, field representatives.

## HIGHSIDE CHEMICALS CO. SPACE 122

WHAT products will be shown—

"Thawzone" fluid dehydrant and "Trace" refrigerant leak detector.

WHO will be there—

Laurence V. Gardner, general manager; Harry M. Katon, office manager; George I. Boone, George B. Boone, Joe E. Parker, A. C. Barbour, W. L. Greenwood, and Merle G. Haynes, sales representatives.

## HONOR BRAND FROZEN FOOD DIVISION, STOKELY FOODS, INC. SPACE 1214

WHO will be there—

E. E. Huddison, vice president; T. C. Waterman, assistant to the vice president; John Wagner and Gordon Butts, divisional sales managers.

## ICE AIR CONDITIONING CO., INC. SPACE 706

WHAT products will be shown—

5-ton self-contained air conditioning unit; 5-ton low side unit.

WHO will be there—

James F. Dailey, president; Edward L. Garfield, treasurer; Don Petrone, sales manager.

## IDEAL COOLER CORP. SPACE 211

WHAT products will be shown—

20-cu. ft. frozen food cabinet; 8 ft. blower-type dry beverage cooler; draft beer cooler with capacity of two half-barrels.

WHO will be there—

Louis Weiss, president.

## IMPERIAL BRASS MFG. CO. SPACE 128

NEW products to be introduced—

"Dia Seal" valve; new "Torpedo" dehydrator with "Micronic" filtering element.

WHAT products will be shown—

Triple seal fittings; tube working tools; service tools and accessories.

WHO will be there—

C. H. Benson, assistant vice president; E. F. Todd, advertising manager; and representatives C. S. Anderson, F. Wilson, T. Byrnes, G. Duerr, T. Monroe,



C. H. Benson

H. Pearson, T. Fuite, A. E. Hallstrom, P. Hathaway, J. McClure, J. Wickstrom, L. Melear, H. McNellis, and A. Mitchell.

## JACK & HEINTZ PRECISION INDUSTRIES, INC. SPACE 102

NEW products to be introduced—

Hermetic compressor; open type condensing units.

WHO will be there—

E. R. Legg, executive vice president; D. R. Fairchilds, advertising manager; Wallace Sargis, industrial sales manager; Lawrence B. Breck, sales department.

## JAMISON COLD STORAGE DOOR CO. SPACE 1112

WHAT products will be shown—

Cold storage doors.

## JARROW PRODUCTS SPACE 322



H. W. Jarrow

WHAT products will be shown—

Door gaskets made of rubber, rubberized fabric, and fabric for use on refrigerators, cooling rooms, and similar applications.

WHO will be there—

Harry W. Jarrow, senior partner; Stanley L. Jarrow, general manager; Richard Nosek, factory superintendent.

Continued on page 61





*What is  
Frost Free  
Refrigeration  
Control?*

Honeywell provides the answer with the Polartron System of Automatic Defrosting Control. — Applicable to all "above freezing" fixtures the Polartron System provides for temperature "Cut-out" and Pressure "Cut-in" operation thus assuring positive defrosting at the end of each "on" cycle. Take advantage of the full capacity built into your refrigeration equipment — use the Polartron System. See your jobber for further details. Minneapolis-Honeywell Regulator Company 2909 Fourth Avenue South, Minneapolis 8, Minnesota. Branches and distributing offices in all principal cities.

*The Polartron System of  
FROST-FREE REFRIGERATION*

OCTOBER, 1946

MINNEAPOLIS  
**Honeywell**  
CONTROL SYSTEMS

# FIVE INDUSTRY GROUPS



Ted I. Glou  
President

**R**EGIONAL meetings and a series of committee reports on manufacturers relations, trade relations, and government contact will highlight the business sessions of the Refrigeration Equipment Wholesalers Association when that group holds its annual meeting in conjunction with the All-Industry Show in Cleveland.

Social activities also rank high on this organization's agenda, with lunches, banquets, dances, and a cocktail party slated to brighten up the routine business sessions.

Most of these activities, both business and social, will take place in the Statler Hotel, where the association will make its headquarters.

Details of the REWA program follow:

## SATURDAY—OCTOBER 26

9 a.m.—Board of Directors meeting—Hotel Statler, Parlor M.

## Refrigeration Equipment Wholesalers Association

*Headquarters—Hotel Statler*

### SUNDAY—OCTOBER 27

10 a.m.—Manufacturers Relations committee meeting—Hotel Statler, Parlor M; Trade Relations committee meeting—Hotel Statler, Parlor L.

### MONDAY—OCTOBER 28

9 a.m. to 12 noon—Registration (members only)—Hotel Statler, South End Mezzanine.

1 p.m.—REMA-REWA luncheon (tickets required)—Hotel Cleveland.

(All wholesalers who desire to do so are invited to attend the RSES banquet and dance at the Hotel Hollenden on Monday evening. Tickets for this event will be on sale at the Hollenden).

### TUESDAY—OCTOBER 29

9 a.m. to 12 noon—Final membership registration—Hotel Statler, South End Mezzanine.

9 to 11:30 a.m.—Regional meetings—Hotel Statler—Region 1, Parlor A; region 2, Parlor M; region 3, Parlor F; region 4, Parlor B; region 5, Parlor C; region 6, Parlor D; region 7, Parlor L; region 8, Tavern Room; region 9, Parlor H; region 10, Parlor G.

6:30 to 7:30 p.m.—Cocktail party (tickets required)—Hotel Statler, Pine Room.

7:30 p.m.—Banquet and dance (tickets required)—Hotel Statler, Grand Ball Room.



H. S. McCloud  
Secretary

### WEDNESDAY—OCTOBER 30

9 to 11:45 a.m.—Closed association meeting (tickets required)—Hotel Statler, Euclid Ball Room. Meeting will consist of 10-minute talks by Theodore I. Glou, president; George J. Roche, chairman, Manufacturers Relations committee; Lem V. Branson, chairman, Trade Relations committee; Edward C. Marsden, chairman, Government Contact committee; Alex H. Holcombe, chairman, Finance committee; R. E. Warwick, chairman, Membership committee; and 10 regional chairmen.

12 noon—Wholesalers luncheon (members and wives—tickets required)—Hotel Statler, Grand Ball Room; Optional activity for ladies only, luncheon and card party (tickets required)—Hotel Statler, Lattice Room.

### THURSDAY—OCTOBER 31

12 noon—REWA-REMA joint luncheon (tickets required)—Hotel Statler, Grand Ball Room.

## Refrigeration Service Engineers Society

*Headquarters—Hotel Hollenden*

**N**INTH annual convention of the Refrigeration Service Engineers Society will be held in Cleveland October 26 to 29, immediately preceding the fourth All-Industry Refrigeration and Air Conditioning Exposition. This will be the first nationwide meeting of the organization since 1942.

In addition to the regular business and educational sessions, the society's program will include conducted tours to various interesting refrigeration installations and manufacturing plants, including the laboratory of the National Advisory Committee for Aeronautics, General Electric Co.'s Nela Park lighting laboratories, and the Weatherhead Co.

The ladies will have their say when the International Auxiliary of the RSES meets during this same period. A full program of business and social affairs has been planned for them.

Entertainment features of the RSES program will include a buffet supper followed by entertainment and a banquet and dance, also with entertainment. Congresswoman Frances P. Bolton of Ohio, a member of the House Foreign Affairs Committee, will speak at the group's Sunday luncheon.

Speakers and subjects slated for the society's sessions include:

"The Refrigeration Service Engineer's Place in the Industry", H. F.

Hildreth, manager, refrigeration specialties department, Westinghouse Electric Corp.; "Things We Need to Know About Foods", Dr. H. C. Diehl, director, Refrigeration Research Foundation, Inc.; "Modernization and Replacement of Obsolete Equipment", E. A. Siebert, director of service, Kelvinator Division, Nash-Kelvinator Corp.

"The RSES Looks Ahead", Paul B. Reed, Perfex Corp.; "The Two Temperature Refrigerator", R. W. Ayres, chief engineer, The Coolerator Co.; "The Modern Repair Service Shop", V. R. Kruse; "Development in Shaft Sealing", Willis Stafford; "Recent

*Continued on page 93*

# HOLD MEETINGS AT SHOW

## National Association of Refrigeration Contractors

Headquarters—Allerton Hotel

**F**IRST annual meeting of the National Association of Refrigeration Contractors will be held in Cleveland October 26th through 29 in conjunction with the fourth All-Industry Refrigeration and Air Conditioning Exposition.

Regular sessions of this group will be open to all refrigeration contractors, whether or not they are members of the association. All meetings will be held at the Allerton Hotel.

Talks on unfair trade practices, licensing of contractors, and benefits of group action will feature the organization's program. A detailed outline of this program follows:

### SATURDAY—OCTOBER 26

1:30 p.m.—Trade Relations Committee meeting.

### SUNDAY—OCTOBER 27

1:30 p.m.—Board of Directors meeting.

### MONDAY—OCTOBER 28

9:30 a.m. to 12:30 p.m.—President's report of progress; treasurer's report; "Is Licensing the Answer?", Raymond J. Shock, Detroit; "What NARC Means to Refrigeration Contractors", Ed Wright, Youngstown, Ohio.

### TUESDAY—OCTOBER 29

9:30 a.m. to 12:30 p.m.—"Unfair Trade Practices", Z. E. Jones, San Francisco; "Why Get Together Locally?" and "How to Operate a Local Association",



Warren W. Farr  
President

N. S. Templin, Los Angeles; reports of committees on Trade Relations, Government Surplus, Labor Relations, Legislation, Membership, Publicity, Finance; election of six directors; amendments to constitution and by-laws.

12:30 p.m.—Luncheon meeting, guests and ladies invited.

6 p.m.—Supper, followed by a Directors' meeting.



J. W. Witte  
President

## Frozen Food Locker Manufacturers and Suppliers Association

Headquarters—Carter Hotel

**C**O-SPONSOR with REMA of this year's All-Industry Exposition, the Frozen Food Locker Manufacturers and Suppliers Association is scheduling a series of business meetings for association members during the Show period.

In addition to its regular business activities, FFLSMA will present a skit dramatizing the trials and tribulations of the locker operator and bearing

the title of "Frozen Scandals of 1946". Written and produced by Wayne Carver, editor of "The Locker Operator", and Ray Farquhar, executive director of FFLSMA, this skit will boast a cast composed entirely of members of the locker industry.

This production and the dance which follows it will be open without charge to all convention guests.

A "what, when, and where" guide to FFLMSA activities during the Show is presented below:

### SUNDAY—OCTOBER 27

2 p.m.—Meeting of present Board of Directors—Carter Hotel.

### MONDAY—OCTOBER 28

10 a.m.—Registration—Auditorium.

### TUESDAY—OCTOBER 29

9:30 a.m.—Meeting and report of Standards Committee, L. O. Warner, chairman—Carter Hotel.

### WEDNESDAY—OCTOBER 30

9:30 a.m.—Annual meeting of entire membership—Club Room B, Auditorium.

8 p.m.—"Frozen Scandals of 1946"—Music Hall, Auditorium.

10 p.m. to 1 a.m.—Dancing—Arena, Auditorium.

### THURSDAY—OCTOBER 31

9:30 a.m.—Meeting of new Board of Directors—Carter Hotel.

## National Frozen Food Locker Association

Headquarters—Allerton Hotel

**U.**S. SENATOR Kenneth Wherry of Nebraska, outstanding proponent of de-control of agricultural products, heads the list of speakers lined up by the National Frozen Food Locker Association for the meetings it will hold in conjunction with the fourth All-Industry Show in Cleveland.

Donald K. Tressler, eminent authority on frozen foods, also is scheduled to speak before the locker operators. Economic and financial aspects of the locker plant industry will be discussed by Leland Plummer, vice president, Central National Bank & Trust Co., Des Moines, Iowa.

Discussion periods will be devoted to such subjects as standards of service, construction programs, customer relations, and the wage and hour law and other government regulations.

Plans also will be laid for future national conventions, regional confer-

*Continued on page 94*

# HOW TO FIND YOUR WAY AROUND

## SOUTH EXHIBIT HALL

EXHIBITOR	SPACE
Acme Industries, Inc.	314
Aircraft Service Co.	319
Airtemp Div., Chrysler Corp.	404, 406, 408 & 410
All-Steel Equipment, Inc.	315
American Flange & Mfg. Co., Inc.	119
American Injector Co.	126
Automatic Products Co.	223 & 225
R. H. Bishop Co.	103
Black, Sivals & Bryson, Inc.	108
Bridgeport Thermostat Co., Inc.	307
Brown Electric Co.	207
Brunner Mfg. Co.	321 & 323
Bundy Tubing Co.	407
Butcher Boy Cold Storage Door Co.	113
D. R. Card Co.	105
Container Corp. of America	325
Coolstream Corp.	303
Cornelius Co.	205
Curtis Refrigerating Machine Div., Curtis Mfg. Co.	212 & 214
Cushman & Denison Mfg. Co.	308
Cutler-Hammer, Inc.	304 & 306
Davison Chemical Corp.	208 & 210
Day & Night Mfg. Co.	312
Dayton Rubber Mfg. Co.	425
Drayer-Hanson, Inc.	403
E. I. du Pont de Nemours & Co.	418 & 420
Elco Mfg. Co.	201
Food Locker Equipment Co.	328
Frigidaire Div., General Motors Corp.	417 & 419
Frosted Food Field.	405
Frozen Food Industry & Locker Plant Journal.	422
General Electric Co.	228, 411 & 413
General Engineering & Mfg. Co.	412
Griffith Laboratories	427
W. A. Hammond Drierite Co.	415
Heat-X-Changer Co., Inc.	426
Henry Valve Co.	227
Highside Chemicals Co.	122
Ideal Cooler Corp.	211
Imperial Brass Mfg. Co.	128
Jack & Heintz Precision Industries, Inc.	102
Jarrow Products Co.	322
Kalamazoo Vegetable Parchment Co., Wrapping Paper Div.	107
Kason Hardware Corp.	203
Kerotest Mfg. Co.	224 & 226
Kinetic Chemicals, Inc.	316
Kold-Hold Mfg. Co.	414
Kramer Trenton Co.	114
Lehigh Foundries, Inc.	416
Lily-Tulip Cup Corp.	423
Lindley Box & Paper Co.	120
Livar Corp.	209
Locker Publications Co.	110
Lynch Mfg. Co.	216 & 218
A. E. MacAdam & Co., Inc.	109
Marathon Corp.	111
Master Mfg. Corp.	215
Mayflower Products, Inc.	115
Midwest Metal Stamping Co.	117
Mills Industries, Inc.	302 & 401
C. F. Mohr Associates	112
Mueller Brass Co.	428

Nevinger Mfg. Co., Inc.	317
Nickerson & Collins Co.	104 & 106
Pacific Lumber Co.	127
Pacific Mfg. Co.	219
Penn Electric Switch Co.	125
Perfection Refrigeration Parts Co.	220
Polar Hardware Co.	124
Quick Frozen Foods	217
Ramsey-Bennett Co.	318
Ranco, Inc.	324 & 326
Redmond Co., Inc.	221
Refrigeration Appliances, Inc.	118
Rotary Seal Co.	311
Safe-Way Food Locker Co.	123
Salem Engineering Co.	320
Shellmar Products Co.	305
Sporlan Valve Co.	431 & 433
Superior Valve & Fittings Co.	131
Temprite Products Corp.	327
Tenney Engineering, Inc.	310
Texas Co.	206
Thermal Co., Inc.	409
E. W. Twitchell, Inc., Packaging Div.	309
United Cork Companies	133
United Friguarator Engineers	429
Universal Cooler Div., International Detrola Corp.	129
Virginia Smelting Co.	116
Wabash Mfg. Co.	424
Weatherhead Co.	301
Weber Showcase & Fixture Co.	222
George M. Wessells Co.	101
Westinghouse Electric Corp.	204
White-Rodgers Electric Co.	213
Wolverine Tube Div.	313

## NORTH EXHIBIT HALL

EXHIBITOR	SPACE
Ace Ice Cream Cabinet Co.	501
Amara Society, Refrigeration Div.	505
American Brass Co.	609
The American Society of Refrigerating Engineers	608-A

## SHOW TIMETABLE

Here is the schedule of show hours for the 1957 International Refrigeration and Air Conditioning Exposition

Tuesday, October 29.....12:00 to 5:00 p.m.

Wednesday, October 30.....12:00 to 5:00 p.m.

Thursday, October 31.....12:00 to 5:00 p.m.

Friday, November 1.....10:00 to 5:00 p.m.

The Show will be open to the general public from 7 to 10 p.m. on Thursday, October 31 and Friday, November 1.

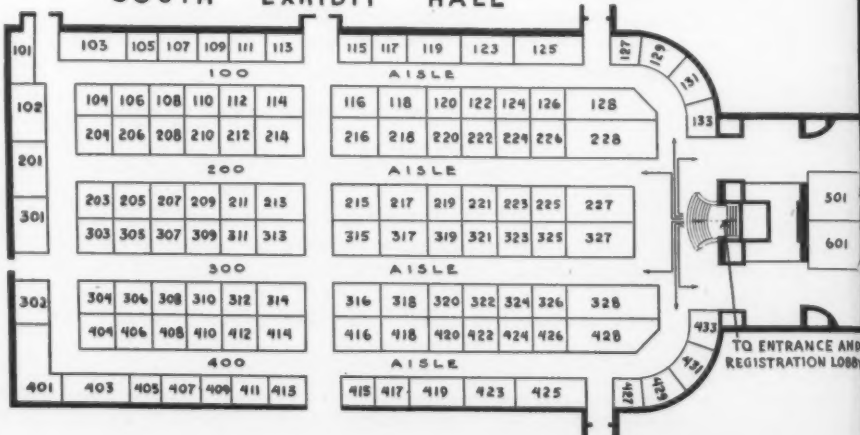
Baker Ice Machine Co., Inc.	506
Bush Mfg. Co.	610
Business News Publishing Co.	507
Chicago Seal Co.	502
Detroit Lubricator Co.	503 & 603
Dole Refrigerating Co.	605
Goodsell Corp.	601
Marlo Coil Co.	602
McIntire Connector Co.	611
Minerva Wax Paper Co.	512
Monsanto Chemical Co., Merrimac Div.	608
National Gypsum Co.	613
Refrigeration Corp. of America	508
Refrigeration Equipment Wholesalers Association	607-A
Refrigeration Service Engineers Society	607

Standard Refrigeration Co.	504
Stangard-Dickinson Co.	505
United Refrigeration Co.	506
Universal Refrigeration Co.	507
York Corp.	508

## UPPER EXHIBITOR

Alco Valve Co.	509
All-American Refrigeration Co.	510
American Cold Storage Co.	511
Arcade Mfg. Co.	512
Armstrong Cold Storage Co.	513
Biro Mfg. Co.	514
Bonney Forge Co.	515
Boston Technical School	516

## SOUTH EXHIBIT HALL





# UND THE ALL-INDUSTRY SHOW

## ABLE

for the Fourth All-  
ing Exposition:

Noon to 6 p.m.

Noon to 6 p.m.

Noon to 10 p.m.

a.m. to 4 p.m.

al public from  
October 31.

Refrigeration Co. ....509  
erson Corp. ....504  
erator Mfg. Co. ....511 & 513  
olite Insulation Co. ....510  
.....604

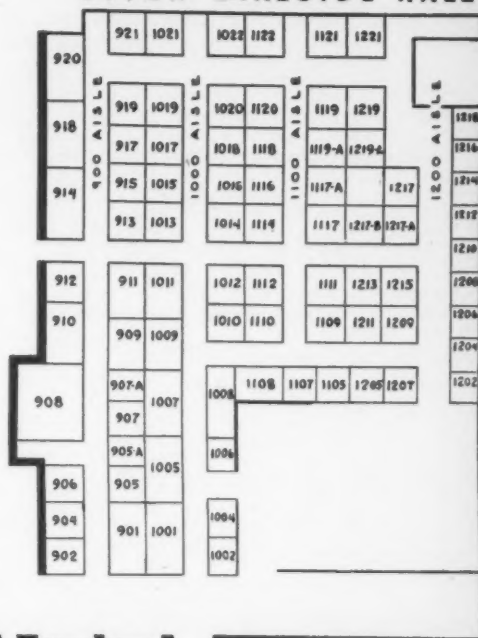
## ER LAKESIDE HALL

SPACE  
.....914  
Meat & Bone Cutter Co. ....1202  
s Co. ....911  
Div., Rockwell Mfg. Co. ....1216  
rk Co. ....906  
.....919  
& Tool Works. ....1010  
ical Institute. ....1119

Earle E. Brown Organization .....1006  
Brunswick-Balke-Collender Co. ....904  
B. H. Bunn Co. ....1119-B  
Cleveland Refrigerator Co. ....913  
Carrier Corp. ....1109 & 1111  
Cordley & Hayes .....1004  
Doughboy Industries, Inc. ....1110  
Electric Glass Co. ....1119-A  
Electric Power Equipment Corp. ....1007  
Electromatic Div., Simoniz Co. ....1015  
Enrichment Products Co. ....1218  
Eston Chemicals, Inc. ....907  
Fedders-Quigan Corp. ....1002  
Fleetwood Airflow, Inc. ....915  
Food Freezing .....907-A  
Frozen Food Locker Mfrs. & Suppliers  
Association .....908  
General Controls Co. ....1122  
L. H. Gilmer Co. ....1118  
Goodyear Tire & Rubber Co. ....1108  
Grand Rapids Brass Co. ....1205  
Honor Brand Frozen Foods Div.,  
Stokely Foods, Inc. ....1214  
Jamison Cold Storage Door Co. ....1112  
Jiffy Mfg. Co. ....1219-A  
Joliet Chemicals, Ltd. ....1208  
Jordan Refrigerator Co. ....912  
Linde Air Products Co. ....1013  
Minneapolis-Honeywell Regulator Co. ....1014  
Minneapolis Show Case & Fixture Co. ....905-A  
Nash-Kelvinator Corp., Kelvinator Div. ....1001  
National Association of Refrigeration  
Contractors .....1105  
National Frozen Food Locker Association ....908  
Norge Div., Borg-Warner Corp. ....1005  
Owens-Corning Fiberglas Corp. ....909  
Penn Brass & Copper Co. ....1210  
H. A. Phillips & Co. ....1206  
Quillen Bros. Refrigerator Co. ....1011  
Refrigeration Engineering Co. ....1207  
Sanitary Refrigerator Co. ....1009  
Schnacke, Inc. ....902  
Servel, Inc. ....901  
Spir-O-Freez Co. ....1019

A. E. Staley Mfg. Co. ....1219  
Siering Refrigeration Co. ....910  
Tyler Fixture Corp. ....1008  
U. S. Air Conditioning Corp. ....1204  
Utah Wax Refining Co. ....905  
Utilities Engineering Institutes .....1107  
Whitney Bros., Inc. ....1212  
Yoder Co. ....1012

## UPPER LAKESIDE HALL







**COPELAND  
REFRIGERATION CORPORATION  
SIDNEY, OHIO**

**OPEN-TYPE  
UNITS**

Copeland belt-driven units have an enviable reputation for dependable performance. Models range from 1/6 H.P. to 7-1/2 H.P. inclusive. They incorporate outstanding seal, suction valve, discharge valve and other design features developed throughout Copeland's 28 years of exclusive refrigeration experience. The model illustrated is a 1/3 H.P. remote type.

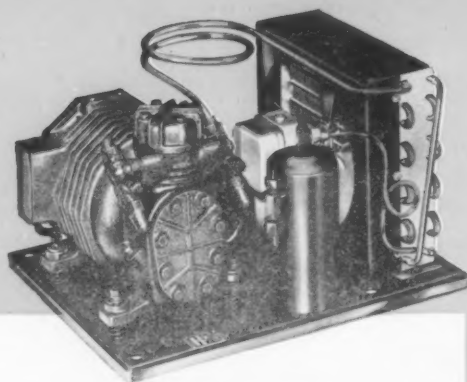
**THESE PRODUCTS**



**Copeland**  
DEPENDABLE *Electric* REFRIGERATION

**USES**

**MUELLER BRASS CO.  
PARTS ON ALL MODELS**



**COPELAMETIC UNITS**

These ACCESSIBLE HERMETICS are the ideal refrigeration for "package" equipment. No belt! No seal! No manual oiling required! Copelametic combines all the good features of welded-in hermetics and open-type units. The design is field-proven by over 100,000 units in service. Sizes range from 1/20 H.P. to 3/4 H.P. inclusive. The model illustrated is a 1/4 H.P. self-contained type.

**MUST BE GOOD!**

Illustrated on the left hand side of this page are some of the valves and fittings manufactured by the Mueller Brass Co. of Port Huron, Michigan, that are used on the Copeland Units illustrated above.

Mueller Brass Co. Valves, Fittings and Accessories for mechanical refrigeration have a well-earned reputation for built-in quality and time-tested performance. They are manufactured specifically for mechanical refrigeration work. THEY ARE USED BY ALL OF THE LARGEST MANUFACTURERS THROUGHOUT THE UNITED STATES. Mueller Brass Co. products must be good!

We, at Mueller Brass Co., are proud of our contributions to the dependability and operating efficiency of Copeland Units, known and enthusiastically used the world over.

**MUELLER BRASS CO.**  
PORT HURON, MICHIGAN

# REFRIGERATION INDUSTRY

# News

## **SURVEY OF VETERANS' TRAINING ORDERED**

Veterans Administration has ordered an immediate survey of all veterans enrolled in on-the-job training under the GI Bill of Rights to assure itself that all courses meet the requirements of Public Law 679. After Jan. 1, 1947, VA expects it will not be paying subsistence to veterans who are not in training under the legislation.

As a part of its new move, VA also has placed apprentice training courses under the same general standards which govern other on-the-job training. These must now be officially recognized as apprentice courses by the state approving agency or the Administrator of Veterans affairs.

## **PUBLIC HEARINGS SET ON WISCONSIN CODE**

A series of five public hearings on the proposed revision of the Wisconsin state refrigeration code of 1918 were held last month in Madison, Milwaukee, LaCrosse, Superior and Green Bay. The code covers refrigeration only, air conditioning being covered by the state industrial commission's heating and ventilation code.

The five-man committee appointed to advise the industrial commission on the code revision includes E. F. Vilter, representing refrigeration manufacturers and the Wisconsin Manufacturers Association; R. H. Langer, representing users of equipment and the state association of power engineers; J. V. O'Neill, representing insurance interests; George Sault, representing the Wisconsin State Federation of Labor; and M. A. Edgar of the commission.

## **BUILDICE MOVES**

Buildice Co., Inc., refrigeration contractors and engineers, has moved to a new location at 2610 S. Shields Ave., Chicago.

## **ASRE WILL MEET DECEMBER 16-18**

The 42nd annual meeting of American Society of Refrigerating Engineers will be held December 16 to 18 in New York City.

Program for the meeting is now being arranged, with one of the features of the technical sessions being a symposium on refrigerated transport of foods. Tentative speakers listed for this session include R. G. Setzkorn, American Refrigerator Transit Co.; Gordon Wilson, New York Central Railroad; A. E. Huff, Birds Eye-Snyder Co.; L. L. Westling, Matson Navigation Co.; John N. Kelley, United Fruit Dispatch Co., and D. F. Fisher, U. S. Dept. of Agriculture.

Nominees for national officers of the society, to be chosen by mail ballot, are: For president, R. R. Money, Louisville, Ky.; for vice presidents, C. F. Holske, New York City; Burgess H. Jennings, Chicago; for treasurer, Paul B. Christensen, New York City; for directors, George B. Bright, Detroit; Leon Buehler, Jr., Chicago; Arthur J. Hess, Los Angeles; S. R. Hirsch, Utica, N. Y.; Edgar S. Ross, Philadelphia.

## **CONDENSING UNIT GROUP IN APPEAL ON PIG IRON**

Seriousness of the effect of the government's control of pig iron supply on the production of refrigeration condensing units was attested to by the recent visit of a committee of the Rema Condensing Unit Section to Washington in an effort to convince authorities of the essentiality of refrigeration equipment in terms of the proper preservation of the nation's food supply.

Specific purpose of the activity was to get condensing units on the "A" list for priorities under the pig iron allocation program. If condensing units fail to get on the list, some manufacturers estimate that their fourth-quarter 1946 production of these units may be cut by 50 to 60%.

## **BURL BOYKIN DIES OF HEART ATTACK**

Burl Boykin, Jr., vice president and general manager of Standard Brass & Mfg. Co., Beaumont, Tex., refrigeration wholesaler, died Aug. 24 of a heart attack. At the time of his death he was in New Orleans, where he was com-



Mr. Boykin

pleting arrangements for opening a branch office and warehouse by his company.

Mr. Boykin, a son of one of the founders of Standard Brass & Mfg. Co., went to work for the company following his graduation from Notre Dame. He organized the company's refrigeration division in 1937, and acted as its manager from that time on until his death. In addition to its Beaumont headquarters, the company has branches in Houston and Port Arthur, Tex. and Shreveport, La.

He was chairman of the Southwestern Refrigeration Wholesalers Association, and was active in civic organizations in Beaumont.

Since his death, Don Cornell has been acting as manager of the Beaumont branch, with William Glasgow as assistant manager.

## **TRUCK UNIT MAKER**

Kold-Trux, Inc., 4200 W. Easton Ave., St. Louis, has been organized with paid-in capital stock of \$5,000 to make two-way truck refrigeration units. Noel Lowther is president.

## **HOUSEHOLD PRICES INCREASED 6%**

An increase of approximately 6% in retail prices of household mechanical refrigerators was announced by OPA, effective August 21, 1946. On a standard unit, the increase will be from \$10 to \$12.

The increase results in part from a new reconversion price increase of 3.5% granted refrigerator manufacturers. When a previous industry-wide increase was granted manufacturers, OPA required resellers to absorb what amounted to 2.5% of the retail price.

Passing on 6% to consumers is mandatory under reseller provisions of the Price Control Extension Act of 1946, which requires that resellers be permitted to retain their percentage mark-ups in effect on March 31, 1946.

## **PRICE FORMULA ON USED '46 UNITS**

A method of determining retail ceilings on used 1946 models of all household mechanical refrigerators has been announced by OPA. The maximum cash price, effective August 26, that may be paid for any used 1946 model, reconditioned and guaranteed for 90 days, is 85% of the original retail ceiling of the box when sold new. On "as is" sales, \$3.50 will be deducted from the above amount. An additional \$5 may be charged when used '46 models are sold under a guaranty for one year or more.

## **JULY REFRIGERATOR SHIPMENTS UP 5%**

Shipments of household mechanical refrigerators increased approximately 5% in July, totaling 220,000 units as compared to 210,000 units, the total for June. The July rate, however, is still 28% below the 1940-41 monthly average of 309,000 units. Tin mill blackplate, condensers, motors, castings, and enameled steel continued to be in short supply.

## PERFECOLD ADOPTS ARMY'S PERSONNEL SCREENING METHOD

Application of the U.S. Army Air Forces "psycho-screening" method of air crew selection to the selection of industrial employees has been announced by Perfecold, Inc. This company believes itself to be the first concern in the refrigeration industry to adopt such scientific methods of aptitude determination in the hiring of its employees.

William E. Walton, A.M., Ph.D., has been appointed as personnel director of the organization, and will be in charge of administering this new program. Dr. Walton, who served during the war as test and coordinating officer at the Santa Ana Army Air Base and as chief of the psychological unit at Amarillo, Tex., plans to use the same approach in industrial personnel selection.

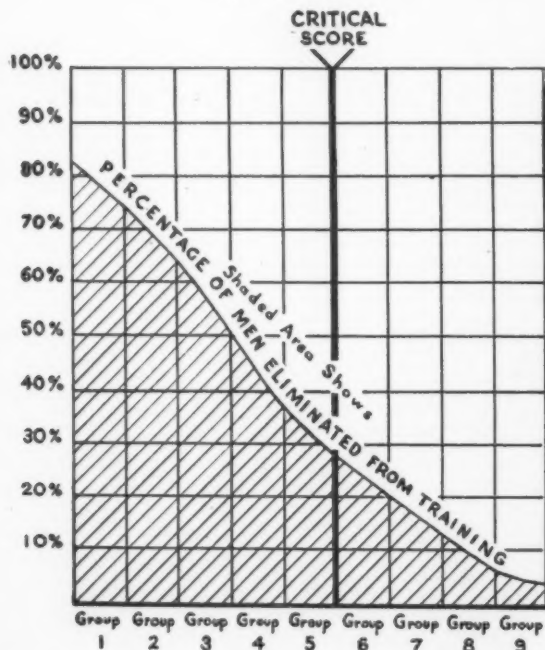
The management of Perfecold, Inc., has long realized the importance of per-

sonnel aptitude testing, and has used this method of selection for several years. Under the direction of Dr. Walton the application of a practical system of psycho-screening will carry this established policy to its maximum efficiency.

It is felt that the adoption of this method of screening will, when applied to industrial personnel selection, give the company better qualified men who will be able to make more money for themselves and the company, who will fit in better with the organization, and who will best represent the company both in the field and in the shop.

Explaining the technique of psycho-screening, Dr. Walton stated that "it is, briefly, a series of special tests, results of which are interpreted by a trained psychologist."

"In the Army program," he said, "a critical point was established, below which an applicant was not admitted for training."



This chart summarizes results of the psychological screening test which the U.S. Army Air Forces gave to 225,000 of its air crew trainees. The resultant test scores were divided into nine groups. It was found that the men who had scores below those in Group 6 were not qualified for training, so the lowest score in that group was selected as the critical point below which men would not be admitted to training. The result was fewer accidents, fewer men dropped from the training program because of incompetence, and a generally better integrated and better qualified body of flight personnel. It is this system which Perfecold will employ.

## J. H. H. VOSS DIES

J. H. H. Voss, president of J. H. H. Voss Co., valve manufacturer, died Aug. 5 after an illness of several months. Mr. Voss came to this country from Germany in 1912, and was first employed by DeLaVergne. He organized his own company in 1924, when the so-called high speed or light compressor valves were becoming popular. He was a member of ASRE, and acted as a consultant in addition to his manufacturing activities.

## FOUR NEW FIRMS JOIN N. C. ASSN.

Four new members of the Commercial Refrigerator Association, which has members throughout eastern Carolina, were added at the organization's recent monthly meeting in Greenville, N. C.

They were: Standard Electric Co., Rocky Mount; Franks Refrigeration Co., Burlington; Bray's Radio Co., Greenville; and Gould-Morris Electric Co., Raleigh. Headquarters of the association are in Raleigh, with meetings being held in key cities throughout the territory.

Speakers at the meeting included Austin C. Campbell, of Hussmann Refrigeration, Inc., St. Louis, who discussed dealers' financial operations, and H. R. Walser, of Commercial Credit Corp., Baltimore, who explained the controls imposed by Regulation W.

## CONDENSING UNIT PRICES UP 1-3%

OPA has authorized increases in resellers' ceilings for compressors and condensing units, 5 hp or less in capacity, effective Aug. 23, and in repair and service parts for such units. This increase, which ranges in general from 1 to 3%, restores to resellers the profit margins which were in effect on March 31 of this year.

## ARK. JOBBER MOVES

Refrigeration & Electric Supply Co., Little Rock, Ark. wholesaler of refrigeration parts and supplies, has moved its headquarters from 524 E. Markham St. to 1210 E. 6th St.

## ACRMA TO STUDY COOLING MARKETS

Market studies of important industries to determine the potential requirements for refrigeration and air conditioning equipment will be undertaken by the Air Conditioning and Refrigerating Machinery Association.

Announcement of the establishment of the research and statistical department to conduct this work was made by William B. Henderson, executive vice president of the association. Object of the department will be to maintain current information on the rapidly expanding use of refrigeration and air conditioning machinery and to conduct special studies by assembling, collating and analyzing all available data bearing on the use and the probable new demands for refrigeration and air conditioning machinery.

Early attention will be given to a survey of the food industry, one of the largest users of refrigerating and air conditioning equipment. The first phase of this work, which is already under way, deals with the dairy industry and its sales potential for refrigeration equipment. A part of this study dealing with dairy farming already has been completed.

The work will be carried on to supplement market research activities of member companies for advertising guidance, and to provide a source for public information about the increasing use of refrigeration and air conditioning equipment for production purposes by other industries.

## PENN SWITCH OPENS THIRD FACTORY

A new factory building at 1351 Roosevelt Ave., Indianapolis, has been leased by Penn Electric Switch Co., Goshen, Ind., bringing the company's plant total to three. The second factory was opened last January in Toronto, Canada.

The new plant, which is expected to be going shortly after Oct. 1, has been added to give customers faster deliveries and more efficient service, according to Albert Penn, president. The Indianapolis plant will fabricate and assemble some of Penn's present line of controls, as well as some newly developed products.

## HANDY & HARMAN PLANS COAST PLANT

Handy & Harman is building a new plant in Los Angeles as an augmented service to its customers in the Pacific Coast area. G. H. Niemeyer, president, has announced. The new plant, at 3625 Medford St., Los Angeles, will be opened by the end of the year, and the company's offices will be moved there from the Bendix Bldg., in which they have been located since 1943.

## ACE CABINET TO EXPAND PLANT AREA

Ace Ice Cream Cabinet Co. in an expansion of its manufacturing facilities is taking 75,000 sq. ft. of space in the former Pler Mill property on Belleville Ave., New Bedford, Mass., reports N. S. Bloomenstein. Ace Cabinet's manufacturing program will include farm and home freezers, ice cream dispensing and hardening cabinets, bobtails and soda fountains.

## 1561 NEW LOCKER PLANTS BUILT IN A YEAR; 7 STATES NOW HAVE OVER 400 PLANTS

Despite difficulty in getting equipment and other materials, 1561 new frozen food locker plants have been opened and put in operation throughout the country since last summer, according to reports from State Agricultural Extension Services to the U. S. Department of Agriculture. There were 8025 of these plants open and operating in July, with many others reported under construction in almost all of the states. In 1941 there were only 3,623 of these plants.

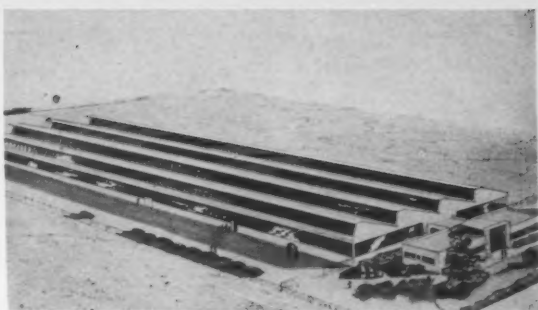
## MUELLER REVISES PHILA. OFFICE

Mueller Brass Co. has recently revamped its sales organization in the Philadelphia territory, with sales of refrigeration equipment, fabricated and mill products and pipe and fittings now being handled by individual representatives.

Fran F. House has been placed in charge of the sale of refrigeration products to both the manufacturing and jobbing trade in the Philadelphia area, which includes Harrisburg and adjoining cities. A veteran of the refrigeration industry, Mr. House is well known among the trade in the eastern area.

## AUTO PARTS FIRM ADDS EBCO LINE

Western Auto Parts Co. of Minot, N. D., has been appointed statewide distributor for the "Oasis" line of electric water coolers manufactured by Ebcro Mfg. Co.



Here is the architect's sketch of the new \$450,000 plant being constructed by Refrigeration Engineering, Inc., manufacturer of "Recold" coils, in the Los Angeles area to house its expanding activities. The company plans to employ up to 500 workers in turning out 16 different types of coils in 145 different models.

★ ★ ★

## NEW REFRIGERATOR VALVE CO. FORMED

The Refrigerator Valve & Mfg. Co. has been organized in Port Huron, Mich., to produce compressor valves, angle valves and dehydrators. Officers of the new firm are Harold A. Curry, president, Nell E. Clouse, vice president, and Robert A. Gray, secretary-treasurer.

Incorporated with capital stock of \$100,000, the firm has received its license to manufacture from the Michigan Corporation and Securities Commission. The company's plant is located at 2206 Ferrand St., Port Huron.

## 'RECORD' COIL FIRM BUILDS NEW PLANT

Refrigeration Engineering, Inc., Los Angeles, manufacturer of refrigeration coils under the trade-name "Recold," will move soon into a three-acre factory located on a 13½-acre tract in the industrial section of Los Angeles County. The new building, representing an investment of more than \$450,000, marks another step in the growth of the company, which began operations back in 1932 with a single mechanic. The new plant will accommodate about 500 workers. Present staff numbers 150.

At the time of its organization in 1932 with Walter F. Hancock as president and Hy Jarvis as vice president, Refrigeration Engineering's production was concentrated on one type of cross-fin coil. Today, however, "Recold" is producing 16 different kinds of coils in 145 different models.

In 1934, the company introduced the first type of blower coil to be manufactured in the west, and for three years was the only firm in the west manufacturing this type of equipment. The company had a complete line of blower coils in 1936.

In 1938, the "Recold" water defrost unit was introduced, a device which was patented in 1940 and which is now being manufactured by eight other licensed U. S. firms.

In only one year of its 14-year history—during the first months of war production—has the firm failed to show a gain in sales volume, it claims. Volume for 1946 is expected to be nearly 20 times as great as the volume for the first six months of business 14 years ago.

Using results of surveys by the Farm Credit Administration, it is estimated that 1,875,000 farm families now are using frozen food locker plants. In addition thousands of town and city people now have this service.

Iowa is the leading frozen food locker state with a total of 655 plants. Minnesota is runner-up with 525 plants. There are seven states with over 400 plants each.

The July 1946 count of locker plants by states:

	1946	1945		1946	1945
Alabama	49	35	Nebraska	345	294
Arizona	17	9	Nevada	7	3
Arkansas	75	55	New Hampshire	26	18
California	438	299	New Jersey	12	10
Colorado	135	99	New Mexico	32	19
Connecticut	50	20	New York	165	155
Delaware	6	6	No. Carolina	45	25
Florida	14	11	No. Dakota	185	165
Georgia	101	49	Ohio	288	223
Idaho	160	149	Oklahoma	299	150
Illinois	450	371	Oregon	325	300
Indiana	213	140	Pennsylvania	184	145
Iowa	655	600	Rhode Island	5	4
Kansas	340	315	So. Carolina	36	17
Kentucky	60	52	So. Dakota	315	289
Louisiana	25	17	Tennessee	89	59
Maine	5	3	Texas	402	260
Maryland	29	23	Utah	97	66
Massachusetts	22	14	Vermont	35	31
Michigan	232	145	Virginia	29	25
Minnesota	525	477	Washington	495	450
Mississippi	78	61	W. Virginia	8	2
Missouri	229	165	Wisconsin	473	473
Montana	159	120	Wyoming	61	46

## STURTEVANT PLANS EXPANDED OUTPUT

B. F. Sturtevant Co. division of Westinghouse Electric Corp., Hyde Park, Mass., hopes to more than double its prewar production rates within the next 12 months, according to G. C. Derry, division vice president and general manager.

The expansion, Mr. Derry believes, will ultimately increase the division's production force by 50% and its sales and engineering staff by 30%. Current backlog of orders in the division totals approximately \$14 million, he said.

## FROZEN FOOD GROUP SETS MEETING DATE

The sixth annual convention of the Frozen Food Institute, Inc., will be held in Boston from March 31 through April 4, 1947. Convention headquarters will be in the Copley-Plaza hotel, and exhibits will be in Horticultural Hall.



## **FREEZER CO. PLANS OUTPUT OF 200 CABINETS MONTHLY**

With completion of new quarters at 18th and Kansas Sts., Fraser & Johnston Co., San Francisco manufacturer of frozen food display and storage cabinets, expects to produce 200 units a month, officials say. The new building has 80,000 sq. ft. of floor area, which will be devoted exclusively to refrigeration equipment, with 80 persons employed.

Cabinets made by the company include the Biltwel "Merchandiser" for retail stores and the "Marketeer" for homes, farms and institutions. Both are 20 cu. ft. units powered by  $\frac{1}{2}$  and  $\frac{3}{4}$  hp machines. No distributors have been named as yet, but national marketing is planned as soon as a \$350,000 backlog has been cleared up.

## **COMMERCIAL GROUP FORMED IN HOUSTON**

Leading refrigerated fixture dealers in Houston, Tex., have organized a local association to be known as the Houston Commercial Refrigeration Association. Tom Sullivan of Gulf Refrigeration Co., was elected president; M. H. Jacobs, of Warren Refrigerator Co., vice president; Louis Conti, of Conti Refrigerator Co., treasurer; and I. W. Bartholomew, of Zerzone Houston Co., secretary.

Directors comprise, in addition to the officers, Don Steele, of Cox & Blackburn; C. W. Ellis, of J. A. Walsh & Co.; Wesley Teaff, of Ed Friedrich Co.; and Bill Malone, of Commercial Refrigerator Sales Co. Meetings will be held each month, with programs designed to further the interests of participating members.

## **VALVE PRICE BOOST TO BE CONTINUED**

The 10% increase in prices granted by OPA last March for certain low pressure valves and fittings will be continued indefinitely, OPA has announced. The increases originally were scheduled to end on Aug. 31, in order to provide time for a survey of cost data. The survey has not yet been completed, and fact-finding will continue with prices at their present levels until the study is ended.

## **LANDING ... LOADING ... LEAVING**



A rush delivery in the really modern manner was effected recently when Jack Hurst, office manager of Hugh Gilmore Refrigeration Co., Pensacola, Fla., flew the company's plane to New Orleans to pick up two OC-94 American coils needed for an emergency installation. These coils were ordered from Enoch's Sales Co., New Orleans wholesaler, by telephone just before Mr. Hurst took off from Pensacola. Within one hour and twenty minutes he had landed at the New Orleans airport and loaded the coils into the plane. At top, Howard McAdams (left) of the Enoch's organization greets Mr. Hurst as he lands at New Orleans. In center, the equipment is transferred from car to plane. At bottom, Mr. Hurst prepares to take off on the return trip, with the coils packed in the plane's rear seat.

## **LINCOLN, NEB. DEALER**

Frigid Service, Inc., has been organized in Lincoln, Nebr., by W. A. Fry and J. E. Cole. The new firm will retail home and farm appliances and wholesale commercial equipment, and operate a refrigeration service department.

## **AIRTEMP FIELD MEN MEET IN DAYTON**

The first sales conference since 1941 of all field sales personnel of Airtemp Division of Chrysler Corp. was held in Dayton recently and attended by over 100 representatives from throughout United States and Canada.

## **CRMA MEMBERS IN ANNUAL MEETING**

J. D. Harris, the Warren Co., Atlanta, was elected president of the Commercial Refrigerator Manufacturers Association at the recent annual meeting of the organization in Chicago. In addition to Mr. Harris, the 1946-47 executive committee will comprise J. J. Leonard, Seeger-Sunbeam Corp., St. Paul, who was elected vice president; A. J. Johnson, Puffer-Hubbard Mfg. Co., Grand Haven, Mich., re-elected treasurer; and William Fogel, Fogel Refrigerator Co., Philadelphia, and J. L. Kaufhold, Weber Showcase & Fixture Co., Los Angeles, who will serve as directors.

A discussion of the recent suspension of commercial refrigerators from OPA control highlighted the program. Steps leading to

## **EXPORTS STILL BELOW PRE-WAR**

U. S. Department of Commerce figures on exports of electric refrigerators and parts for the first five months of 1946 are still considerably behind the 1936-38 level of \$1,604,000 per month. Total value of shipments for this year was: January, \$1,171,000; February, \$1,156,000; March, \$1,432,000; April, \$1,172,000; and May \$1,370,000.

the suspension action were explained by retiring president J. H. Coolidge, of Sherer-Gillett Co., Marshall, Mich., who was chairman of the OPA industry advisory committee. Individual comments indicated a general "hold the line" policy.

A discussion of the recently published Dealer Operations Manual was also featured. W. B. McMillan of Hussmann-Ligonier Co., St. Louis, who headed CRMA's post-war planning committee, was commended on this fine job.

Although the production of refrigerated fixtures has shown a substantial improvement over 1945, industry spokesmen stated, continued materials shortages have seriously impeded the ability of all manufacturers to make any appreciable progress toward clearing a heavy backlog of orders. It was estimated that the present overall backlog of the industry will require 12 to 18 months to clean up, with some individual estimates running as high as two years.



AT THE SHOW!  
SEE OUR EXHIBIT  
BOOTHS 224-226

**KEROTEST**

REGISTERED

U. S. PAT. OFF.

REFRIGERATION

AIR  
CONDITIONING

\$

REFRIGERATION  
AIR CONDITIONING  
VALVES  
FITTINGS

BY

**KEROTEST**

SOLD BY LEADING  
WHOLESALEERS  
EVERYWHERE!

## COMING EVENTS

### CAST PROFIT SHADOWS

The "pent-up" demand for new installations and the need for servicing of old equipment—to keep it in operation—means many profitable years ahead. For assured profits, greater trouble-free service and dependability, be sure the Valves you install have the KEROTEST trade mark.

**KEROTEST MANUFACTURING CO.**

**PITTSBURGH 22, PA.**

NEW YORK • CHICAGO • HOUSTON • LOS ANGELES

OCTOBER, 1946

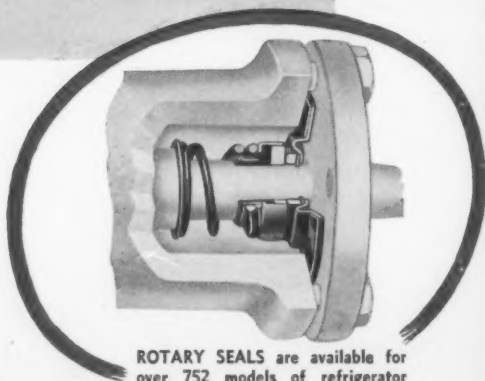
Please  
**CONSIDER**  
THIS AS

AN INVITATION  
TO VISIT US  
AT BOOTH 311 OF THE  
*Refrigeration & Air Conditioning*  
**EXPOSITION**  
in CLEVELAND OCT. 29th to NOV. 1st



**WE ARE LOOKING FORWARD TO SEEING YOU**

The basic design of **ROTARY SEALS** is so simple and yet so fundamentally sound that they assure uniform and complete satisfaction under all operating conditions. Maximum flexibility in the rotating seal is achieved through a durable, diaphragm-acting neoprene ring. The **ROTARY** line is the most complete on the market for either domestic or commercial service. **ROTARY SEALS** are available at all leading jobbers—you can get them when you want them. Don't just say "seals"—say **ROTARY SEALS** and be sure of the best.



**ROTARY SEALS** are available for over 752 models of refrigerator assemblies.



**ROTARY SEAL COMPANY**

2020 North Larrabee St.

Chicago 14, Ill.

CANADIAN OFFICE: 382 Victoria Ave., Montreal 6, Quebec, Canada

**WHO—WHERE—WHAT . . .**  
Continued from page 48

**JEFF MFG. CO.**  
**SPACE 1219-A**

**JOLIET CHEMICALS, LTD.**  
**SPACE 1208**

WHAT products will be shown—  
Various screenings of "Jay Cee" refrigeration and dehumidification grades of Silica Gel.

WHO will be there—  
K. F. Nash, managing partner; L. T. Hartlove, sales manager; J. H. Mosher, and T. R. Comerford, sales engineers.

SPECIAL activities planned—  
Dinner meeting of manufacturers agents representing Joliet Chemicals.

**JORDON REFRIGERATOR CO.**  
**SPACE 912**

NEW products to be introduced—  
Model 16 L.L. home and farm freezer; Model 40 "Streamlined" all purpose refrigerator and dry beverage cooler; Model R-42 DT reach-in refrigerator with 42-cu. ft. capacity for normal temperature storage and including 6 cu. ft. of frozen food storage space; Model SC 30 self-contained reach-in refrigerator; Model 22 S.C. frozen food display case.

WHAT products will be shown—  
Combination display and storage meat and dairy case; Model 16 S.C. frozen food display case.

WHO will be there—

Harry Hanover, in charge of exhibit;  
Robert Duffy, sales manager.

**KEROTEST MFG. CO.**  
**SPACE 224 & 226**

**KALAMAZOO VEGETABLE  
PARCHMENT CO.**  
**SPACE 107**

WHAT products will be shown—  
Wrapping papers, waterproofed and otherwise, for the packaging of foods.

WHO will be there—  
C. C. Sherman, sales manager, wrapping paper division; Arthur Sterenburg, northern Ohio salesman.

**KASON HARDWARE CORP.**  
**SPACE 203**

WHAT products will be shown—  
Refrigerator hardware.



George Allen

WHAT products will be shown—  
Improved models of line valves and float valves.



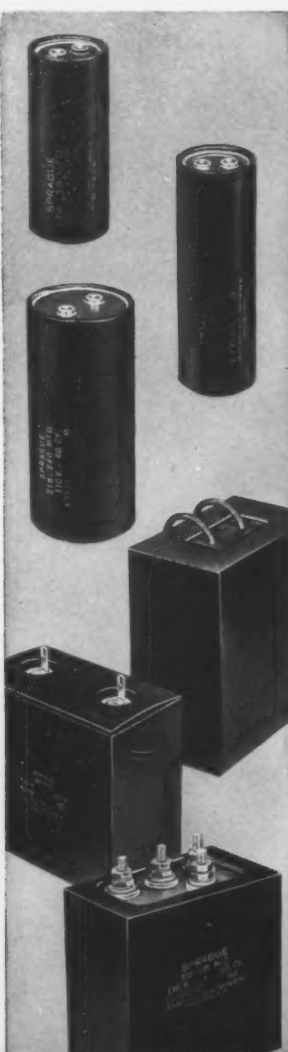
Now Ready . . . the New  
**FREEZRLARM**

. . . it's a PROFIT-MAKER!  
. . . it's a TROUBLE-SAVER!

Freezrlarm effectively renders a REAL service to every customer. It is the exclusive, self-contained warning signal which sounds an alarm, whenever temperature rises, from ANY cause. Not connected in any way with electrical systems. You make \$9.60 on every sale. Send in a sample order today and get going with this fine profit-maker.

Price \$12.35 to authorized dealers  
Maintained retail price.....\$21.95

**FREEZRLARM CO.**  
832 S. Ludlow St., Dayton 2, Ohio



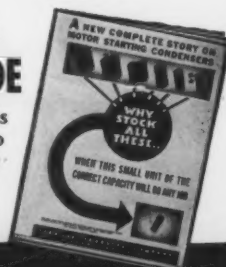
These Few Sprague  
Universal Types  
**MEET EVERY  
MOTOR-START  
CAPACITOR  
REPLACEMENT  
NEED!**

Follow the lead of prominent motor manufacturers! Standardize on Sprague Universal Motor-Start Capacitors for every replacement. You can handle almost any job from a stock of less than a dozen capacitors. They fit anywhere. They're available to cover all standard capacities, all motor speeds and horsepower ratings. Write direct if your jobber doesn't have them.

**SPRAGUE PRODUCTS CO., North Adams, Mass.**  
Distributing organization for products of  
Sprague Electric Co.

WRITE FOR  
**FREE GUIDE**

Form C-356 tells  
exactly how to  
select the right  
replacement for  
any job.



**SPRAGUE Universal**  
**MOTOR-START CAPACITORS**

WHO will be there—

George R. Allen, general sales manager, brass division; R. W. Mueller, Jr., sales promotion department; H. E. Ferrill, engineer; Gene Lytle, sales department; H. P. O'Brien, New York division manager; A. H. Fine, Chicago division manager; Austin Jones, Ohio division manager; J. A. Norris, field representative,

SPECIAL activities planned—

Sales meetings of field men present. Los Angeles; L. W. Mosely, field representative, Tulsa.

# KINETIC CHEMICALS, INC. SPACE 316

WHAT products will be shown—

"Freon" refrigerants, with display featuring actual laboratory tests proving



R. J. Thompson

their purity and safety characteristics.

WHO will be there—

R. J. Thompson, sales manager; R. L. Williams, assistant sales manager; F. A.

Fetherer, laboratory supervisor; J. B. Gillie, assistant advertising manager.

# KOLD-HOLD MFG. CO. SPACE 414



J. R. Tranter



E. A. Thiele

WHAT products will be shown—

"Serpentine" cold plate and truck plate in operation; standard plate stand, plate bank, and liner.

WHO will be there—

J. R. Tranter, president and general manager; E. A. Thiele, vice president and sales manager; Lee S. Worthington, assistant secretary; C. K. Davis, assistant sales manager; L. R. Burr, chief engineer; R. B. Henriksen, sales engineer; and the following regional representatives: H. C. Hoover, eastern; J. C. Jackson, New England and New York; R. D. Spittler, middle eastern; T. O. Lester, Chicago; A. L. Golay, middle western; L. J. Freitas and Jim Parish, southwestern; T. R. Schroeder and J. M. McQuaid, Pacific coast.

# TYPHOON

A RESPECTED NAME  
IN AIR CONDITIONING

## 3 and 5 TON SELF-CONTAINED UNITS

All-purpose, handsomely designed, smooth functioning air conditioning units with all copper condenser and liberally designed coils—removable outlet box for use with duct system—removable panel in back of outlet box for additional grills where front and back air distribution is desired in center of room . . . two way adjustable deflecting grill . . . knock-out for fresh air connection . . . removable one-piece panel in front for easy accessibility. The cabinets are made of furniture steel . . . crackle finish.



VISIT THE TYPHOON DISPLAY  
at the ALL-INDUSTRY SHOW

CLEVELAND, OHIO • Oct. 29 to Nov. 1

TYPHOON



PRODUCTS

PROP-R-TEMP Self-Contained Air  
Conditioning Units, 3 and 5 tons.

TYPHOON LOW-SIDES, 3 and 5 ton  
Units.

TYPHOON EVAPORATIVE CONDENSERS.

MONSOON Heating, Direct Expansion  
and Water Coils.

ICE AIR CONDITIONING CO., INC.

794-6 UNION STREET • BROOKLYN 15, N. Y.

This Is the New

# BIRO

Sensational, exclusive,  
patented advancements  
and improvements.



BUILT IN

3

SIZES

You can buy  
a Biro to fit  
your need.

• This new Biro can be completely disassembled, cleaned and put together again without tools. It's the most remarkable power meat cutter ever designed. See it at the show.

THE

# BIRO

MFG. COMPANY  
MARBLEHEAD, OHIO

THE REFRIGERATION INDUSTRY



**KRAMER TRENTON CO.**  
**SPACE 114**



Israel Kramer

WHAT products will be shown—  
Working model of "Thermobank" system  
with automatic defrost for low tempera-  
ture applications.

WHO will be there—  
Israel Kramer, treasurer; Harry Kling-  
ler, sales manager; S. Charles Segal,  
chief engineer.

**LEHIGH FOUNDRIES, INC.**  
**SPACE 416**



J. C. Miller

WHAT products will be shown—  
"M&E"  $\frac{1}{2}$  and 1-hp compressors.

WHO will be there—  
Frank E. Shumann, president; Alvin A.  
Shumann, treasurer; J. C. Miller, general  
manager; Neill Mitchell, advertising  
manager; Charles Berry, public relations  
director; and the following sales repre-  
sentatives: C. B. Coombs, New England;  
Fred Ritter, New York; Roy Bissett,  
Pennsylvania.

**LILY-TULIP CUP CORP.**  
**SPACE 423**

WHAT products will be shown—  
Round waxed nested frozen food con-  
tainers.

WHO will be there—  
L. V. Keefe, manager, packaging divi-  
sion; J. E. Nicholson, and R. Philpott,  
territorial division managers; K. Bloss-  
som; R. B. Taylor.

**LINDE AIR PRODUCTS CO.**  
**SPACE 1013**

WHAT products will be shown—  
"Prest-O-Lite" air-acetylene equipment  
for detecting refrigerant gas leaks and  
for soldering, brazing, and heating; oxy-  
acetylene welding and cutting equip-  
ment; refrigerant gas cylinders.

**LINDLEY BOX & PAPER CO.**  
**SPACE 120**

WHAT products will be shown—  
"Locker-Paks," moisture-proof cartons

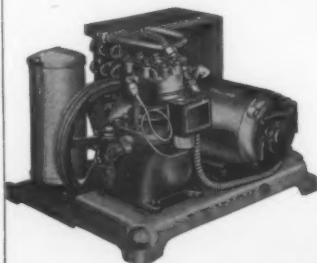


*-- it's 416  
for the Lehigh Team*

*At the*  
**ALL-INDUSTRY REFRIGERATION  
and AIR CONDITIONING EXPOSITION**  
**Cleveland, October 28 - November 1**

**S**TEP right up, folks! Here is the commercial  
equipment that has the whole industry talking  
about Lehigh—and right here with it you will  
find the men who designed it, make it, and sell  
it in your territory. Don't miss the Show—and,  
particularly, don't fail to drop in at **416** to  
get better acquainted. You'll find the latch-key

under the Welcome Mat—and  
we'll be looking for you!



*Lehigh*

**HEAVY DUTY  
CONDENSING UNITS**

Complete Line to include  $\frac{1}{4}$  to 5 H.P.



*Lehigh Mfg. Co., Inc.*  
PLANT: LANCASTER, PA.

for frozen food packaging.

WHO will be there—

Neal Banter, sales director; P. M. Brattain, Ohio representative; Fred Haase, Cleveland representative.

### LIVAR CORP.

SPACE 209

NEW products to be introduced—

Balanced eccentric hermetic sealed compressor and condensing units.

WHO will be there—

Allen P. Livar, president; Fred J. Wetjen, sales manager; Miss Emma A. Robinson, secretary to Mr. Livar.

### LOCKER PUBLICATIONS CO.

SPACE 110

### LYNCH MFG. CORP. SPACE 216 & 218



R. L. Sears

WHAT products will be shown—

Commercial refrigeration condensing units from  $\frac{1}{4}$  to 5 hp.

WHO will be there—

M. H. Pendergast, president; J. P. McCarthy, vice president; F. K. Zimmerman, treasurer; R. L. Sears, sales manager; A. V. Petersen, assistant sales manager; G. C. Davis, chief engineer; R.R. Seibel, works manager; J. A. Wagner, advertising counsel; and the following district managers: D. E. Stenson, eastern; B. J. Scholl, central; C. B. Pierce, southeastern; B. D. Berk, north central; E. W. Montgomery, southwestern; W. A. Doepel, Pacific coast.

### A. E. MacADAM & CO., INC.

SPACE 109

WHAT products will be shown—

Frozen food packaging materials for locker plants and home freezer dealers.

WHO will be there—

A. E. MacAdam, III, executive vice president; F. W. Junger and Wm. G. McShane, sales representatives.

### MARATHON CORP.

SPACE 111

WHAT products will be shown—

"Freeztex" locker wrappers for meat, poultry, fruit, and vegetables; packages for commercial frozen food processors.

WHO will be there—

Carl Franzen, promotion manager for locker packaging; Fred M. Deutsch, sales manager for commercial frozen food packaging; Gordon Becker, Cleveland sales representative; Owen E. Lyons, advertising manager.

### MARLO COIL CO.

SPACE 602



Lou Pellegrini

WHAT products will be shown—

Commercial coils; blast coils; unit coolers; industrial coolers; evaporative condensers.

WHO will be there—

A. T. Marlo, president; L. C. Pellegrini, vice president; C. D. Marlo, treasurer; and the following members of the sales department: A. G. Loeffel; H. R. Iverson; W. B. Moses, Jr.; W. C. McIntyre; R. C. Holsworth.

### MASTER-BILT REFRIGERATION MFG. CO.

SPACE 712

NEW products to be introduced—

Two new "De Lux" model home and farm freezers, with capacities of 13½ and 20 cu. ft.

WHAT products will be shown—

Model BC 40 beverage cooler; Models 011 and 017 home and farm freezers; Models CW-4S and CW-6D standard milk coolers.



U.S. INSTRUMENTS Tell The Truth



PRESSURE, TEMPERATURE,  
FLOW, ELECTRICAL AND LEVEL  
MEASURING INSTRUMENTS

6 out of 10  
manufacturers of  
original equipment  
specify U. S. G.

## UNITED STATES GAUGE

DIVISION OF AMERICAN MACHINE AND METALS, INC.

SELLERSVILLE, PENNSYLVANIA (1)

WHO will be there—  
C. J. Hunter and H. J. Klawiter, partners.

**MASTER MFG. CORP.**  
**SPACE 215**

WHAT products will be shown—  
Food storage lockers.

WHO will be there—  
W. W. Wilson, president; Bryce H. Vollmar, vice president.

**MAYFLOWER PRODUCTS, INC.**  
**SPACE 115**

WHAT products will be shown—  
Air cooled condensing units; water cooled condensing units; air conditioners.

WHO will be there—  
Brouse D. Rinehart, president, Albert Green, engineer.

**McINTIRE CONNECTOR CO.**  
**SPACE 611**

WHAT products will be shown—  
Dehydrators; strainers; filters; wire mesh screen products.

WHO will be there—  
L. S. Dunn, president; H. A. Chandler, secretary; J. C. Howe, Jr., treasurer; J. G. Beierlein, production engineer.

**McQUAY, INC.**  
**SPACE 701**



C. L. Bensen

WHAT products will be shown—  
Low temperature unit coolers; "Zero-pak" speed-tunnel freezer; "Chillator", "Standard", and "Junior" models of unit coolers; ice cube makers.

WHO will be there—  
R. C. Colman, vice president and general sales manager; C. L. Bensen, manager, refrigeration department; R. E. Keller, refrigeration jobber division; G. R. Klahn, locker plant equipment; E. H. Lambert, New York office; M. F. May, Chicago office.

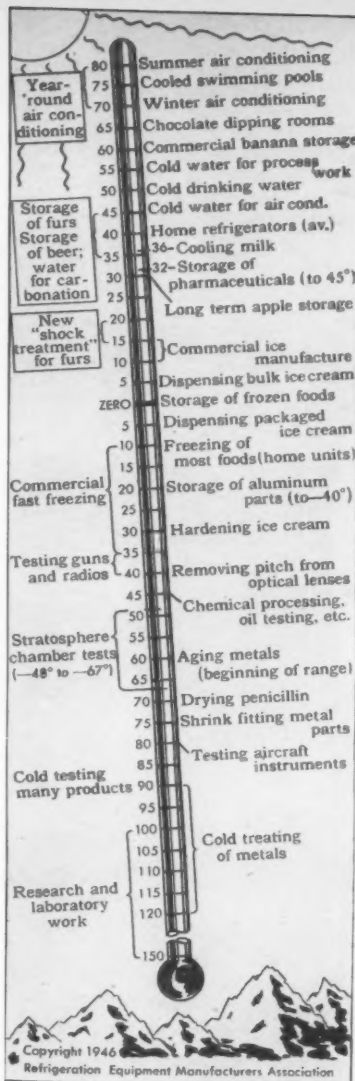
**MIDWEST METAL STAMPING CO.**  
**SPACE 117**

WHAT products will be shown—  
Freezer trays and freezer trucks.

WHO will be there—  
E. E. Jackson; H. K. Veber.

**MILLS INDUSTRIES, INC.**  
**SPACE 302 & 401**

WHAT products will be shown—  
Refrigeration condensing units.



Copyright 1946  
Refrigeration Equipment Manufacturers Association

Typical applications of refrigeration in a 230-degree temperature range are shown in this "all-industry" thermometer prepared by Refrigeration Equipment Manufacturers Association with the co-operation of refrigeration and air conditioning engineers. In a recent survey of the services now performed by mechanical refrigeration and air conditioning, Rema listed more than 200 uses, ranging from 80 degrees above zero for comfort air conditioning to 150 degrees below zero for cold-treating of metals and in research work. Equipment covering this entire range will be shown by exhibitors at the Fourth All-Industry Refrigeration and Air Conditioning Exposition.

WHO will be there—  
Harrison J. Hedrick, manager, refrigeration division; Richard K. Law, director of advertising; A. E. Wilson, manager, counter freezer division; M. D. Pass-



H. J. Hedrick

more, assistant to vice president in charge of sales; and district sales managers Carl Picker, Hillis Iams, and A. T. Murray.

**MINERVA WAX PAPER CO.**  
**SPACE 512**

WHAT products will be shown—  
Specially treated locker paper; foil mounted with paper.

WHO will be there—  
R. C. Hathorn, chairman of board; A. F. Gluck, president and general manager; R. C. McCaskey, vice president; W. L. Hogue, vice president; L. O. Barber, superintendent; Fred Gluck, assistant superintendent; A. L. Patmore, sales manager, Breadwrap Division; W. O. Brunt.

**MINNEAPOLIS-HONEYWELL REGULATOR CO.**  
**SPACE 1014**



G. M. Kingsland

WHAT products will be shown—  
Automatic controls and control systems for refrigeration and air conditioning systems.

WHO will be there—  
G. M. Kingsland, manager, specialties control division; Frank E. Walbridge, manager, Cleveland zone; J. E. Haines, vice president, commercial controls division; Wesley R. Moore, Cleveland regional manager.

**MINNEAPOLIS SHOW CASE & FIXTURE CO.**  
**SPACE 905-A**

WHAT products will be shown—  
"Sterling" junior refrigerated display case.

WHO will be there—  
F. E. Jernberg, executive vice president; R. C. Groth, sales manager.

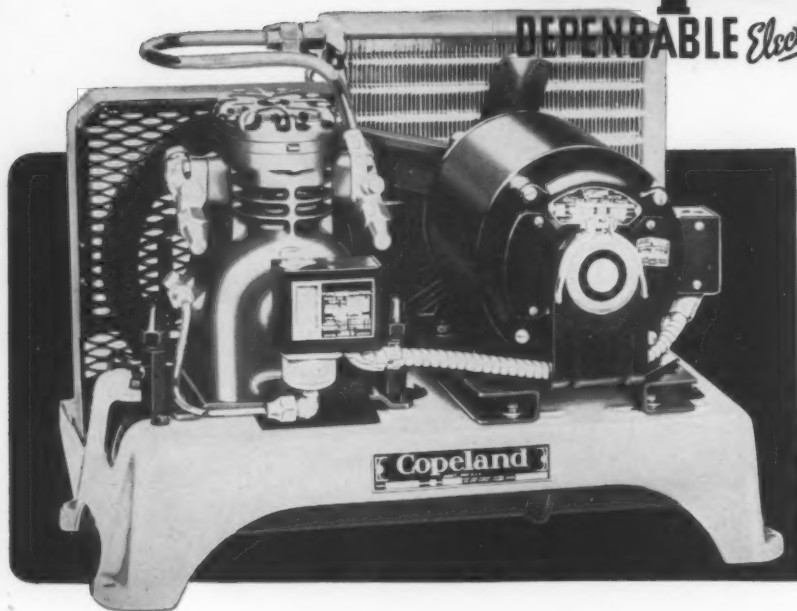
**C. F. MOHR ASSOCIATES**  
**SPACE 112**

WHAT products will be shown—  
Continued on page 79

# PROTECTION AT THE KEY POINT

## Copeland

DEPENDABLE *Electric* REFRIGERATION



Like an arch without a keystone, your refrigeration system won't hold up without true strength in the refrigeration unit. Get EXTRA protection with a time-tested, heavy duty Copeland unit, proved in every field.

The Copeland unit keeps your system operating at top efficiency with the greatest economy. Its dependable operation is a tribute to manufacturing know-how and pioneering and development in the field. At the key point, get the strongest unit . . . a Copeland.



**COPELAMETIC**  
The Accessible Hermetic

**COPELAND REFRIGERATION CORPORATION, SIDNEY, OHIO**





# About People

**Paul Jackel** has been appointed general sales manager of Tyler Fixture Corp., manufacturer of commercial refrigerators and farm and home freezers. A Navy veteran, Mr. Jackel had been New England divisional manager of the company since his discharge in October, 1945. From 1937 until his enlistment in 1942, he was in charge of Tyler's New England and Boston office.



**Harry Blakeman** has been appointed executive vice president of United Refrigerator Mfg. Co.'s eastern division plant at Connellsville, Pa., succeeding Earl M. Pettibone, who has resigned. Mr. Blakeman formerly was comptroller in the eastern division plant.

**Walter S. Landon**, chief engineer of the oil burner controls division of Detroit Lubricator Co., died Aug. 21. He had been with the company 23 years, and was a recognized authority on oil burner control design.

**George W. Hamilton** has been appointed director of purchases of Seeger-Sunbeam Corp. He formerly was traffic and service manager, and has been with the company 21 years. E. J. Vollhaber continues as purchasing agent, and K. J. Fishleigh is acting traffic manager.

**Robert S. Sloan** has been appointed district appliance manager of Westinghouse Electric Supply Co.'s northern California district, with his headquarters in San Francisco. He formerly was metropolitan appliance manager for the company at Seattle.

**W. L. Dively**, sales engineer in the Buffalo (N.Y.) area for Century Electric Co., St. Louis, died recently

following a heart attack. Before coming to Buffalo about eight years ago, he represented Century in the Philadelphia territory.

**Erle J. Zoll** has been named president of Chicago-Wilcox Mfg. Co., Chicago manufacturer of gaskets. He has been with the company for 29 years, and in his new capacity will continue to be in charge of sales. Other officers of the company include R. B. Anthony, chairman; H. B. O'Brien, secretary, and R. B. Anthony, Jr., treasurer.

**Douglas C. Lynch** has been appointed assistant general manager of Westinghouse Electric International Co. He has been with Westinghouse since 1933, and with the international company since 1937, and most recently was manager of the special projects department.

**Dr. A. R. Stevenson, Jr.**, staff assistant to General Electric Co.'s vice president in charge of engineer-

ing policy, died Aug. 18 following a heart attack. He was 53 years old. He had been active in the development of G-E refrigeration products, and was a past national president of ASRE.

**Richard T. Abrell**, recently named eastern sales manager of Redmond Distributors, Inc., has been transferred to the company's eastern office in the Graybar Building, New York City. Redmond Distributors is sales agency for products of Redmond Co., Inc., Owosso, Mich.

Three major changes in the official staff of Thermal Co., Inc., St. Paul refrigeration wholesaler, have been



Mr. King



Mr. Wallace

announced by H. W. Small, president. **E. F. King** becomes executive vice president and retains his former office of secretary; **H. F. Wallace** becomes vice president in charge of



## TEAMS UP WITH ALL REFRIGERATORS

### ANSUL

# ICE-X

TRADE MARK REG. U.S. PAT. OFF.

ICE-X quickly cures emergency freeze ups when ice forms at the expansion valve or capillary tube. Harmless to use. Great for Freon, Carrene, or Methyl Chloride systems. ...The dependable liquid anti-freeze.

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EXCLUSIVE NATIONAL DISTRIBUTOR

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**JOBBERS: WRITE FOR SPECIAL PROPOSITION!**



**\$4 COMPLETE** **PAY ONLY \$1 A MO.**

**AUDELS REFRIGERATION AND AIR CONDITIONING GUIDE** Answers Your Questions on Basic Principles, Servicing, Operation and Repair of Household Refrigeration—Special Refrigeration Units—Commercial and Industrial Refrigeration—Air Conditioning Systems—Over 1280 Pages, 46 Chapters, 700 Illustrations—Diagrams including data on Freon, Quick Freezing, Lockers and Water Coolers. A new timely book containing practical facts and figures for better service. Easy to understand and Handy Ready Reference.

Step up your own skill with the facts and figures of your trade. Audels Mechanics Guides contain Practical Inside Trade Information in a handy form. Fully Illustrated and Easy to Understand. Highly Endorsed. Check the book you want for 7 days' Free Examination.

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- ☐ OIL BURNER GUIDE, 384 Pages. 1.
- ☐ POWER PLANT ENGINEERS Guide, 1500 Pages. 4.
- ☐ PUMPS, Hydraulics & Air Compressors, 1658 Pgs. 4.
- ☐ WELDERS GUIDE, 400 Pages. 1.
- ☐ BLUE PRINT READING, 416 Pages. 2.
- ☐ SHEET METAL WORKERS Handy Book, 388 Pgs. 1.
- ☐ SHEET METAL PATTERN LAYOUTS, 1100 Pgs. 4.
- ☐ AIRCRAFT WORKER, 240 Pages. 1.
- ☐ MATHEMATICS & CALCULATIONS, 700 Pgs. 2.
- ☐ MACHINISTS Handy Book, 1600 Pages. 4.
- ☐ MECHANICAL Dictionary, 968 Pages. 4.
- ☐ AUTOMOBILE GUIDE, 1540 Pages. 4.
- ☐ DIESEL ENGINE MANUAL, 400 Pages. 2.
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- ☐ SHIPFITTERS Handy Book, 272 Pages. 1.
- ☐ MECHANICAL DRAWING COURSE, 160 Pages. 1.
- ☐ MECHANICAL DRAWING & DESIGN, 480 Pgs. 2.
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- ☐ PLUMBERS & Steamfitters Guides (4 vols.). 6.
- ☐ MASONS & Builders Guides (4 vols.). 6.
- ☐ MASTER PAINTER & DECORATOR, 320 Pgs. 2.
- ☐ GARDENERS & GROWERS GUIDES (4 vols.). 6.
- ☐ ENGINEERS and Mechanics Guides
  - Nos. 1, 2, 3, 4, 5, 6, 7 and 8 complete. 12.
- ☐ Answers on Practical ENGINEERING. 1.
- ☐ ENGINEERS & FIREMANS EXAMINATIONS. 1.
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- ☐ WIRING DIAGRAMS, 210 Pages. 1.
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- ☐ RADIOMAN'S GUIDE, 914 Pages. 4.
- ☐ ELECTRONIC DEVICES, 216 Pages. 2.
- ☐ ELECTRIC LIBRARY, 12 vol., 7000 Pgs., \$1.50 vol.

Name \_\_\_\_\_

Address \_\_\_\_\_

Occupation \_\_\_\_\_

Employed by \_\_\_\_\_ R23

merchandising activities, which include both sales and procurement departments; and **H. J. Steege** becomes treasurer.

The Du Pont Co. has announced the appointment of **Walter Dannenbaum** as general manager of the Ammonia Department, succeeding **F. A. Wardenburg** who retired June 30. Since 1931, Mr. Dannenbaum has been assistant manager of the department.

**F. C. Evans**, of the F. C. Evans Co., St. Louis, has been appointed



representative for Peerless of America, Inc., in eastern Missouri, southern Illinois and Memphis, Tenn. Mr. Evans has been a manufacturer's representative in the

refrigeration specialties field for the past two and a half years.

Before that, he had been a representative of Airtemp division, Chrysler Corp., in Chicago and Omaha, and with the air conditioning division of American Radiator & Standard Sanitary Corp. in Chicago.

Appointment by Carrier Corp. of four men to new responsibilities in the company's Syracuse, N. Y., organization has been announced. These appointments are: **S. H. Ellison** as manager of product distribution, in addition to his present duties as assistant to the vice president in charge of manufacturing; **W. W. Bryant, Jr.**, as assistant manager of product distribution; **J. A. Palmore** as manager of the sales order department; and **E. C. Weaver** as manager of the warehouse-shipping department.

Appointment of **H. A. Klug** as merchandise manager and **J. B. Baughman** as product supervisor in the refrigeration specialties department at the East Springfield, Mass., Works of the Westinghouse Electric Corp. has been announced. As merchandising manager Mr. Klug will be responsible for sales of the department's products—milk, beverage and water coolers, farm freezers, room air conditioners, reach in refrigerators and condensing units for

other types of commercial refrigeration—to distributors, dealers, and manufacturers. Mr. Baughman will be in charge of product development and production. Mr. Klug, formerly with Frank A. McBride Co., mechanical contractors of Paterson, N. J., spent eight years with the refrigeration and air conditioning division of General Motors. Mr. Baughman has been filling varied field and headquarters assignments in Westinghouse's refrigeration sales department for the past several years.

**Harvey E. Schroeder**, formerly district sales manager in Los Angeles for Parker Appliance Co. of Cleveland has been named manager of the company's newly created Pacific Division. In other appointments the company has named **D. A. Cameron** as assistant general sales manager and **J. E. Murphy** as manager of distributor sales.

Three new field representatives have recently been appointed by Lehigh Foundries, Inc., Easton, Pa. Ac-



Mr. Mayes



Mr. Ritter

cording to J. C. Miller, general manager, additional appointments to cover all major marketing areas will be made in the near future. All current appointees are World War II veterans.

**Thorpe A. Mayes, Jr.**, will cover the southwestern territory comprising Texas, Oklahoma, Arkansas and Louisiana. His headquarters will be in Dallas, Tex.

**Frederick W. Ritter, Jr.**, will cover metropolitan New York and New Jersey, Philadelphia, Delaware, Maryland and Virginia. He is a native of Great Neck, L. I.

**LeRoy M. Bissett**, a native of



Mr. Bissett

Sunbury, Pa., will cover Pennsylvania (except Philadelphia), western New York, Ohio and West Virginia.

**H. R. Iverson**, recently released from active duty in the Navy, where he was a lieutenant commander, has returned to Marlo Coil Co. and has been placed in charge of a new sales office opened by Marlo in Washington, D. C. to serve that area.

**Herman Watzinger** has been named chief engineer of the James J. Corey Corp., Elmhurst, N. Y., design and development engineering firm. He has been senior design engineer for the company since May 1, and will be succeeded in this post by D. Santoro.

**Louis G. Seebach** has been appointed sales manager of the standard products section of the ammonia department of E. I. duPont de Nemours & Co., succeeding Ewing Hymers, who is retiring as of Nov. 1. Mr. Seebach has been with duPont's ammonia department and its predecessor, National Ammonia Co., since 1924.

for **TEMPERATURE\***  
for **MOTOR OPERATION\***

**2 Recorders\***  
for **LESS** than the  
**PRICE of ONE**



The TEMPSCRIBE Recorder is outstanding for its universality. Any TEMPSCRIBE can be quickly converted from temperature recording to time-operation recording simply by changing the door of the instrument. A widely-used combination comprises one clock case (having a 24-hour spring-wound movement) and two doors (one with a bi-metallic temperature element, and one with mechanism for recording motor on-and-off time). This economical set costs very much less than a dual recorder. Even two complete TEMPSCRIBES, to obtain simultaneous records of temperature and motor operation, cost no more than you would normally expect to pay for a single instrument that makes dual records, yet give you all the advantages of two separate instruments! Bul. 704 gives list of ranges, practical application data, and complete details.

Ask Your Wholesaler, or Orders Filled Direct.

**BACHARACH Industrial Instrument Co.**  
7000 BENNETT STREET • PITTSBURGH 8, PA.

## CORRECTION

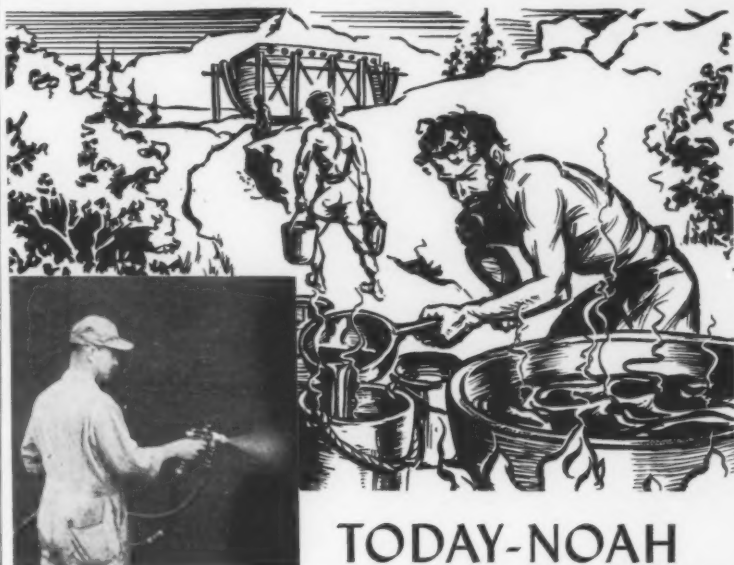
In the story on page 41 of our August, 1946, issue announcing acquisition by Kerotest Mfg. Co. of the valve manufacturing facilities of the Wiljack Co., South Pasadena, Calif., it was erroneously inferred that all of the facilities of the Wiljack firm had been involved in the transaction.

Actually, Kerotest did not purchase all of the manufacturing facilities of Wiljack, and the latter company continues its operations in the manufacture of "Wilpop" lawn sprinklers

and "Wiljack" quick attachable hose couplings, which are marketed throughout the world.

## ACME SUPPLIES OPENS IN NEW ORLEANS

Acme Refrigeration Supplies, Inc., has opened a warehouse and office in New Orleans. Temporary headquarters are at 618 S. Peters St. Harry A. Dawson is president of the company, F. J. Gisevius is vice president, and Andrew Feigler is secretary-treasurer.



## TODAY-NOAH Would Spray His Asphalt COLD

The MODERN way to adhere and seal insulation blocks and vapor-seal membranes is to spray adhesive COLD, right from the barrel, with modern compressed air equipment. You save time, muss and fuss—and get a better job at less labor cost than with traditional HOT binders and fire-hazard methods. Owners and contractors both benefit.

## Laykold\* INSULATION ADHESIVE

is asphalt formulated to apply COLD—by spray, brush, squeegee or trowel.

1. Will not burn—contains no inflammables.
2. No fire hazard to job—no burns for men.
3. No fumes to contaminate stored products.
4. Costs less to apply—faster, cleaner.
5. Sets tacky and ductile—not brittle.
6. Adheres to any type of dry surface; combined with aluminous cement, it adheres to damp walls and floors.
7. Self-heals nails, skewers, seams, cracks.
8. No cracks from vibration or stresses.

LAYKOLD WEATHERCOAT, troweled on, seals insulation permanently moisture-proof, indoors or outdoors. LAYKOLD MASTIC covers any type of sub-floor—is impervious, easy-to-clean, enduring, waterproof and noiseless—the ideal refrigeration floor.

All LAYKOLD PRODUCTS are used at atmospheric temperatures.  
Specifications and prices on request.

\*Reg. U. S. Pat. Off.

## AMERICAN BITUMULS COMPANY

200 BUSH STREET • SAN FRANCISCO 4, CALIF.

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Manufacturer and Mfg. Part No.	A.C. Volts	Capacity Mfd.	Actual Mfd.	Max. Mfd.	AEROVOX Cat. No.	Frames Per Mo.	Dimensions E.H. x L. x W.
MO. ELEC. MFG. CO.	110	45-60	40	50	MSRT-160	100	1 1/2 x 3 1/2
C-4457-E	110	50-60	50	60	MSRT-190	100	1 1/2 x 3 1/2
C-4457-Q	110	64-72	60	80	MSRT-167	100	1 1/2 x 3 1/2
C-4457-H	110	70-75	65	80	MSRT-176	100	1 1/2 x 3 1/2
C-4457-A	110	75-84	70	90	MSRT-196	100	1 1/2 x 3 1/2
C-4457-J	110	85-96	80	100	MSRT-180	100	1 1/2 x 3 1/2
C-4457-L	110	100-120	100	120	MSRT-162	100	1 1/2 x 3 1/2
C-4457-M	110	100-120	115	120	MSRT-171	100	1 1/2 x 3 1/2
	125				MSRT-198	100	1 1/2 x 3 1/2
	150				MSRT-199	100	1 1/2 x 3 1/2
	200				MSRT-207	100	2 x 3 1/2
	250				MSRT-210	100	2 x 3 1/2
	300				MSRT-202	100	1 1/2 x 3 1/2
	350				MSRT-137	100	1 1/2 x 3 1/2
	400				MSRT-148	100	1 1/2 x 3 1/2
	450				MSRT-110	100	1 1/2 x 3 1/2

**AEROVOX**  
MOTOR STARTING  
CAPACITOR  
CAT. NO.  
162  
ONLY FOR STARTING  
CONDENSER TYPE  
MOTOR. USE AT  
60 CY.  
TEMP. 130 DEG. F.  
EACH START 1/2 MIN.  
PATENT NOTICE  
MADE IN U.S.A.  
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● It's easy, safe and profitable to service motor-starting capacitors "The Aerovox Way", because Aerovox listings are thoroughly cross-indexed, include both exact-duplicate and universal replacements, and are kept right up-to-date. At a glance you can pick the right type for any job. And that's what we mean when we say that Aerovox motor-starting capacitors are "Backed by the real 'Know-How'."

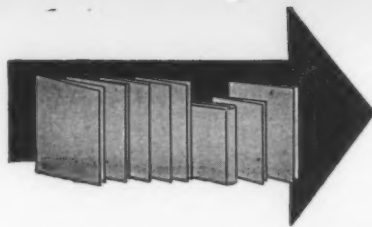
### ● Ask Your Jobber . .

Ask to see the latest Aerovox motor-capacitor catalog. Select the exact-duplicate or universal type for that job. Your live-wire jobber has an adequate stock to take care of your needs.



**FOR RADIO-ELECTRONIC AND  
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Export: 13 E. 40th St., New York 18, N.Y. • Cable: "ARLAB"  
In Canada: AEROVOX CANADA LTD., Hamilton, Ont.



## Useful Literature

The publications listed below are available to readers without charge. Simply list on the postcard provided in this issue the numbers of the items you wish to receive, and send it to **THE REFRIGERATION INDUSTRY**, 1240 Ontario Street, Cleveland 13, Ohio. Your requests will then be forwarded directly to the companies concerned.

### 350—Duplex Tubing Bulletin . . .

A revised edition of its bulletin on duplex tubing (No. 746), issued by Bridgeport Brass Co. Duplex tubing, made up of copper to the water side and low carbon steel to the ammonia side, is used to replace steel tubing in some applications. Bulletin contains a number of drawings illustrating methods of installing duplex tubing for ordinary and corrosion prevention applications.

### 351—Pressure Gauges . . .

An eight-page brochure on its line of pressure gauges, issued by Gotham Instrument Co., Inc. Contains complete listing of illustrations of various types of indicating gauges, structural features, and dimensions.

### 352—Condenser Tubes Bulletin . . .

"Condenser Tubes", a new brochure issued by Wolverine Tube Division of Calumet & Hecla Consolidated Copper Co. Includes several tables designed to help users of condenser tubes select most efficient materials for their operating equipment. Contains graph giving safe working pressures, lists estimating data.

### 353—Squirrel Cage Motors . . .

A new bulletin (No. 720) issued by Louis Allis Co. to cover its Type OG standard squirrel cage induction motor. Covers construction, features, and some typical applications.

### 354—Tachometers Bulletin . . .

A new bulletin (No. S1400) announced by the Bristol Co., describing its line of tachometer recorders and indicators. This 12-page bulletin includes a complete description of various tachometers in the company's line, gives wiring diagrams, application data, and accessory information.

### 355—Thermobank Bulletin . . .

A bulletin (No. 16) issued by Kramer Trenton Co. on its recently developed Thermobank system for low temperature refrigeration applications. The book gives a comprehensive coverage on low temperature applications, and will be generally useful to the application engineer in the freezing temperature field. Rapid selection tables save time in selecting low- and high-side equipment for commonly encountered freezer jobs.

### 356—Service Tools . . .

A one-page catalog sheet issued by Hinsdale Mfg. Co. illustrating and describing its refrigeration service tool sets, No. 119 and 127. Lists

price of complete set and of individual tools comprising it.

### 357—Compressor Shaft Seals . . .

A folder issued by Modern Design Products Co. describing its line of compressor shaft seals. Describes construction and features of the unit.

### 358—Test Lamp and Voltage Indicator . . .

A one-page leaflet available from Holub Industries, Inc., describing its new combination safety test lamp and voltage indicator for use on AC or DC circuits to locate grounds, opens, blown fuses, motors running single phase, etc., and to indicate approximate voltage.

### 359—Cooling Units Catalog . . .

An attractive 20-page catalog (CD46) issued by Tenney Engineering, Inc. Among products listed are unit coolers, Kwik-Freeze ice makers, Tenney coil and pan combinations, wall mounted panel units, bunker type coils, display case coils, gravity coils, beer cooling coils, etc. Coil selection tables, heat leak load tables, etc. included.

### 360—Remote Control Servo-Motor . . .

Two-page bulletin illustrating and describing the new Transicoil "Servo-Motor" for remote control applications. Features are outlined, and performance chart shows efficiency of this unit.

## CRIDER INCORPORATES, NAMES SALES MANAGER

Crider Engineering & Mfg. Co., organized recently in Lima, Ohio, to manufacture single and two-stage compressors, has been incorporated as Crider Corp., capitalized at \$100,000, reports T. G. Crider, president and general manager.

Oliver J. Kesti, formerly with Universal Cooler and Puro Filter Co., has been named to handle sales and advertising for the company. Willis S. Siferd, a Lima attorney, is also associated with the corporation. Other officers remain the same.

The company plans to start production the last quarter of this year at the rate of 500 units per month, increasing to perhaps 1000 units per month, materials situation permitting.

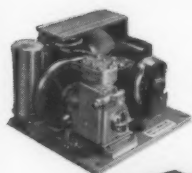
**THE REFRIGERATION INDUSTRY**



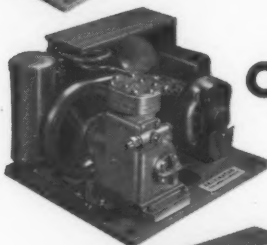
# *Three Factors that Count...*

## IN CONDENSING UNITS

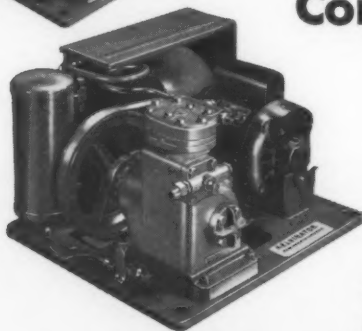
### *Kelvinator's*



**Trouble-Free Performance...**



**Convenient Warehousing...**



**Competitive Price!**

#### **HERE'S HELP FOR TRAINING SERVICE PERSONNEL**

Kelvinator's "Trouble-Shooter's Guide for Refrigeration Service Men" . . . a handy pocket-size booklet for training additional personnel. Ask your local Kelvinator Distributor or Zone Office about it.



Performance, price and an easily accessible supply point are certainly important factors to the buyer of commercial condensing units . . . and Kelvinator is the best bet for getting all three!

Backed by more than 30 years experience in designing, building and engineering the development of commercial refrigeration, Kelvinator offers full assurance of dependable performance. A network of 50 strategically located depots throughout the nation will solve your problems of *where* to buy—and Kelvinator's enviable reputation in the condensing unit field will assure you *what* to buy.

KELVINATOR • Division of Nash-Kelvinator Corp., Detroit



**CONDENSING UNITS OPEN AND SEALED**

**BUY KELVINATOR FOR YOUR COMMERCIAL REFRIGERATION REQUIREMENTS**

## FIND 16% 'WATER' IN ELMIRA ORDERS

A study recently made by the Elmira (N. Y.) *Star-Gazette* and *Advertiser* to get the facts on duplication of orders with dealers for household refrigerators has found a 16% duplication of orders.

Dealers representing 71% of the total retail sales volume made available to the newspaper complete lists of their customers. A tabulation showed that out of 1,879 orders on the books of 18 dealers, 237 were duplicates. Most dealers required a

cash deposit with orders. Two mail order houses, not identified, showed only 9% and 7%, respectively, of duplication.

## STEVENS CO. TO MAKE APPLIANCE THERMOSTATS

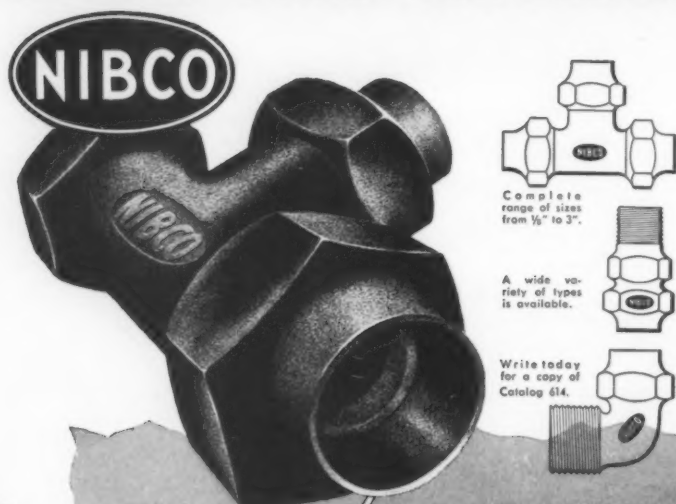
Stevens Mfg. Co., has been organized in Mansfield, Ohio to engage in the manufacture, design and sale of electrical appliance and industrial thermostats. W. C. Stevens is president. Sales offices are in the Richland Trust Building, Mansfield. Prior to

organizing his own company, Mr. Stevens was for 21 years with Westinghouse Electric Corp.

## NEW ADMIRAL OUTLET IN WICHITA, KAN.

Hennigh's, Inc., Wichita, Kan., has been appointed distributor for Admiral products in that territory. The organization is owned and operated by Jack and Bill Hennigh, who have been active in the radio and appliance field for 20 years.

# FLARED TUBE FITTINGS



**FOR USE WITH SOFT DRAWN COPPER TUBES**

**NIBCO** Flared Tube Fittings for use with soft copper tubes make a tight and ever-lasting joint without using heat, solder or cutting threads. The copper tube is flared against the fitting nose and is drawn tight by the union nut. No gaskets are needed. Because soft drawn copper tubes can be readily run through partitions and under floors, you'll find NIBCO Flared Tube Fittings ideal for modernization work. Get the facts now! Write today for Catalog.



**NORTHERN INDIANA BRASS CO.**

ELKHART, INDIANA

VALVES AND FITTINGS SINCE 1904



## FIVE DOLLARS REWARD

WILL be paid by

The Refrigeration Industry for any information on installation or servicing procedures and short-cuts accepted for publication in its **HERE'S HOW** department.

Send your suggestions on shop equipment and methods, tools, or other ideas to

**HERE'S HOW EDITOR**

**THE**

**REFRIGERATION INDUSTRY**

1240 ONTARIO STREET  
CLEVELAND 13, OHIO

# VISOLEAK

detects even the smallest leaks before they cause damage to expensive refrigeration systems. Years of use prove it safe, economical, easy to use.

## NEW CHARGING SET

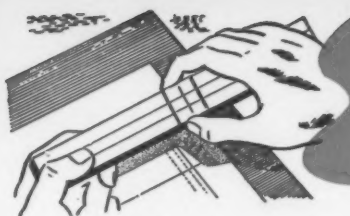
The **VISOLEAK** Charging Set was developed to inject **VISOLEAK**, add refrigerant oil or re-charge sealed units. For use on all types of refrigeration systems without danger of introducing air or foreign matter.

Charging Set—complete with hoses \$7.50  
Filler only—without hoses..... 6.00  
See your refrigeration supply jobber or write for complete information.



**WESTERN THERMAL EQUIPMENT CO.**  
1701 West Slauson Ave., Los Angeles 44, Calif.

**THE REFRIGERATION INDUSTRY**



## New PRODUCTS

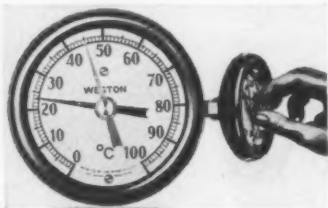
For further information on any of these products, simply list the key number at the head of each item on the special post card enclosed with this issue.

### Thermometer • • • • • P-134

**Product:** Max-Min all-metal thermometer.

**Manufacturer:** Weston Electrical Instrument Corp., Newark, N. J.

**Features:** Indicates maximum or minimum temperatures reached. Has auxiliary red index which is manu-



ally set by finger knob, and which allows recording of either highest or lowest temperature reached in any operating period. Pointer will remain at high or low point until manually reset. Available in two models, in usual Weston ranges and stem lengths from 2½ to 48 inches.

### Portable Electric Sander • P-135

**Product:** Portable electric sander.

**Manufacturer:** Sterling Tool Products Co., Chicago.

**Features:** Flexible sanding pad detaches from machine simply by pulling out a latch, facilitating changing of pads. Covers entire range of abrading from coarse sanding to lapping and finishing. Pad locked on by tumbler action.

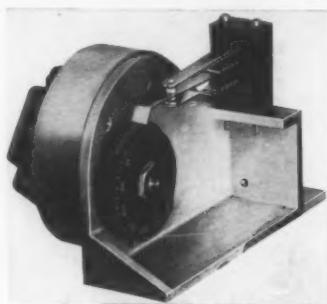
### Time Switch • • • • • P-136

**Product:** Electric defrost time switch.

**Manufacturer:** Automatic Tem-

perature Control Co., Philadelphia, Pa.

**Features:** Especially designed for cold water spray systems for defrosting condenser coils. Operates at speeds from 4 to 12 hours per complete revolution, speed selectable at time of ordering dependent upon ap-



plication requirements. Switch shuts off motor and compressor on each cycle, opens magnetic 3-way valve in water line which sprays over and washes down frosted coils. Time delay is allowed so water can drain off coils, avoiding premature coil frost.

### Vibro-Insulator • • • • • P-137

**Product:** Vibro-Insulator rubber and metal devices to cushion industrial equipment.

**Manufacturer:** B. F. Goodrich Co., Akron, Ohio.

**Features:** Three new types, 130, 133, 144; recommended for use as feet or bumpers for blowers, fans, pumps, etc. Devices will support loads from 60 to 180 lbs. Use provides quieter operation, greater stability of equipment, vibration absorption.

### Room Conditioners • • • P-138

**Product:** Yorkaire room conditioners.

**Manufacturer:** York Corp., York, Pa.

**Features:** Three models, two of them window sill units, designed for use in homes and small offices. Styled

in walnut wood cabinets. May be used year around; equipped with removable filter pads. Smallest unit is for rooms up to 15 x 19 feet, has ½



hp motor, will remove 5,250 Btu/hr. at outside temperature of 90 F dry bulb, 75 F wet bulb and inside temperature 80 F at 50% relative humidity. Second unit for rooms up to 20 x 20 feet has ¾ hp motor, removes 7,750 Btu/hr. Console model has ¾ hp motor, removes 9,000 Btu/hr, is designed for rooms up to 20 x 25 feet. Smallest model is 26½" x 14½" x 19¼" deep; console model is 39½" x 32½" x 19½" deep.

### Home Freezer • • • • • P-139

**Product:** Eskimo Freeze aluminum home freezer unit.

**Manufacturer:** Reynolds Metals Co., Louisville, Ky.

**Features:** Cabinet constructed of aluminum, weight complete in 185 lbs., said to be much lighter than others of comparable size. Available in natural aluminum or white enamel finish. Storage space 6 cu. ft.; 36" high, 40" long, 28" deep from



front to back, with lift-type top. Equipped with ⅓ hp. sealed condensing unit using Freon-12. Insulated with 4" of insulation. Ex-

terior has signal light which indicates unsafe temperature.

#### Warning Device • • • P-140

**Product:** New type of warning signal for refrigerators.

**Manufacturer:** Temperature Control Devices, New Haven 15, Conn.

**Features:** Light glows when unit needs attention. A patented item, it will be sold to only one service organization in each area, and will carry that concern's name and phone num-

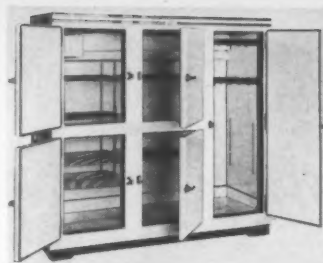
ber to insure its getting service call. To install requires drilling one small hole, which is insulated by plastic which serves as light conductor, but additional units sold only to authorized firms.

#### Reach-In Unit • • • • P-141

**Product:** Model R-65-L reach-in refrigerator.

**Manufacturer:** Jordon Refrigerator Co., Philadelphia, Pa.

**Features:** Unit has 65 cu. ft. capac-



ity, includes as standard equipment two rows of meat rails and hooks behind a long door. Equipment includes "Climatic Conditioning" unit, a new type coil that is said to provide efficient and trouble-free operation.

## NOW... a cold-box type "Serviceman"



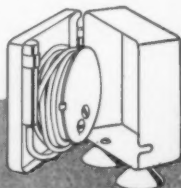
**RANGE**  
- 30° to  
+ 65°!

**Marsh does it again... first!**

IT'S the celebrated Marsh "Serviceman" with range increased to match your ever-increasing work on quick freeze units. Yes, it now indicates from -30 to +65 degrees F. Along with this it has all the features of the original "Serviceman"—the same accuracy, same utility, same ability to tell you what's going on behind the closed door. Here is a "must" for your service kit.

JAS. P. MARSH CORPORATION, 2060 Southport Avenue, Chicago 14, Illinois

\* A heavy-duty precision movement, guaranteed accurate within one degree. Has Marsh "Recalibrator" to keep it accurate. Note hinged back containing bulb and 5 ft. of tubing slender enough to pass between refrigerator door and jamb. Suction cups prevent slipping and protect surfaces. The "Serviceman" is still available in ranges—10° F. to +100° F. and -20° F. to +65° F.



# MARSH

*Refrigeration Instruments*





fast freezing; balance of storage space is maintained at zero. Both sections usable for storage. Has one-



piece welded steel cabinet, fiberglass insulation (4" in walls, 2 1/4" in lid). Sealed condensing unit. Retail price: \$199.50.

#### Pressure Gauge • • • • P-143

*Product:* Large dial size pressure gauge for industrial service.

*Manufacturer:* United States Gauge Division, American Machine & Metals, Inc., Sellersville, Pa.

*Features:* Internal parts of high grade non-corrosive metals. Working elements designed to withstand repeated vibration and abnormally high overpressures. Dial styled for increased visibility. Produced in pressures ranging from 30 to 10,000 psi., with 4 1/2, 6, and 8 1/2 in. dial sizes.

#### Motor Starting Relay • P-144

*Product:* MS2A motor starting relay especially applicable to motors in



hermetically sealed units.

*Manufacturer:* Potter & Brumfield Mfg. Co., Princeton, Ind.

*Features:* No centrifugal switch required. May be mounted on motor housing or at any distance. Operates over a wide range of line voltage

variations and is reliable on normally low lines with their attendant heavier current flow. Trouble-free long armature travel, with fast contact break, minimizes arcing. One simple moving part does all the work. Operates on the back E.M.F. of the starting winding. Prevents "burn outs."

#### Freezer Alarm • • • • P-145

*Product:* Zerostat automatic alarm device.

*Manufacturer:* Electric Glass Co., Philadelphia, Pa.

*Features:* Designed to sound alarm when temperature in home freezer reaches 15 F. Consists basically of mercury thermostat and 3-in. indoor bell; sealed-in-glass platinum contacts for water and dirt protection, plastic coating to prevent short circuits, compact control box. Fits all makes of freezers. Units set for alarm at higher temperatures also available for walk-ins, cooler rooms.

#### Locker Thermometer • P-146

*Product:* Locker plant thermometer.

*Manufacturer:* Minneapolis-Honey-

well Regulator Co.

*Features:* Recording thermometer covers 100-degree range from minus 30 F to plus 70 F; equipped with seven-day chart. Has mercury filled thermal system, permitting evenly spaced chart graduations over its entire range for easier, more accurate readings. Can be operated by either



electrical or hand wound clock mechanism to comply with various state laws. Housed in white enamel case for easy cleaning.

See the new

**COOLSTREAM**

ELECTRIC WATER COOLERS

at the Exposition  
Booth 303  
Cleveland Auditorium

THE **COOLSTREAM**  
CORPORATION

240 BUTLER STREET - BROOKLYN 17, N. Y.



# These Compressor Oils Make More Satisfied Customers

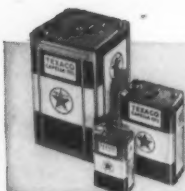
**W**HETHER you're a distributor, dealer or service engineer, *Texaco Capella Oils* will make *more* satisfied customers, *more* profits. Here's why —

*Texaco Capella Oils* carry the recommendation or approval of leading manufacturers of air conditioning and refrigerating equipment. They are highly stable, moisture-free, do not react with refrigerants — have very low pour tests and resist gumming and sludging.

*Texaco Capella Oils* come in a complete range of viscosities to assure dependable,

economical operation of every type and size of compressor. They are packaged attractively in convenient 1-qt., 1-gal. and 5-gal. *re-sealable* containers that enable dealers to make eye-catching window and counter displays — permit service engineers to preserve unused oil in proper condition indefinitely.

You can get prompt delivery of *Texaco Capella Oils* through your regular jobber or dealer. For information, call the nearest of the more than 2300 Texaco distributing plants in the 48 States, or write The Texas Company, 135 E. 42nd St., New York 17, N. Y.



## TEXACO Capella Oils

FOR ALL AIR CONDITIONING AND REFRIGERATING EQUIPMENT



TUNE IN THE TEXACO STAR THEATRE EVERY SUNDAY NIGHT — CBS

*Defrosting*  
**AUTOMATICALLY  
CONTROLLED**

# THE PRACTICAL Refrigeration Engineering MANUAL . . . by Harold Smith



## ● BY PARAGON TIME SWITCHES

Why worry about defrosting? Here's a Switch that provides dependable time control for SHARP FREEZERS in all types of automatic defrosting . . . in locker plants, dairies, breweries, packing houses and commercial refrigeration. Regular defrosting increases efficiency and reduces operating costs.

The PARAGON LINE offers service proved . . . precision . . . quality Time Switches and Timers . . . rugged and durable . . . with a great performance record.

Paragon can produce Time Controls for any system such as Freon, brine, ammonia, etc., regardless of temperature and whether defrosting is done by hot vapor, electric heat or water spray. Put your defrosting problems up to Paragon engineers.

**PARAGON ELECTRIC CO.**

1634 Twelfth St. ext  
Two Rivers, Wis.



"Mr. Tops."  
The Symbol of  
Top Quality

**ALL MODELS  
Telechron  
MOTORED**

**Paragon** *Two Rivers*  
WISCONSIN  
BUILDERS OF ELECTRICAL EQUIPMENT SINCE 1903

## XIV. Cooling Water for Carbonated Beverages

### PART I

THE cooling of water for use in the production of carbonated beverages has become a major production application and use for mechanical refrigeration. Both large and small plants in all parts of the country are turning to refrigerated water cooling to speed up bottling production and to provide a more satisfactory and more uniform product.

In many bottling plants refrigeration is also used to lower the temperature of the syrup before bottling, as well as for the storage of the finished bottled product prior to delivery to the various resale outlets.

### RETAIL USES

In the retail outlets, refrigerated beverage coolers are universally used to enable the dispensing of cold bottled beverages, as the American people like their drinks cold and usually will not compromise on this point, as only cold liquids quench the thirst. Warm bottled beverages are not appetizing or appealing in any respect.

The purpose of cooling water in the production of carbonated beverages, however, has no direct connection with supplying cold drinks to the consuming public.

### IN THE PLANT

In the bottling plant, the need for cold water is based on several highly important conditions.

First: cold water held at a close temperature range assures production stability and holds the carbonated water with the desired percentage of CO<sub>2</sub> gas throughout the entire bottling

and crowning or capping operation.

Second: as low temperature water will absorb a larger percentage of CO<sub>2</sub> gas at a given pressure, the use of cold water enables the bottler to secure and hold the desired percentage of carbonation at the lowest possible bottle pressures.

Third: highly carbonated water produces a lot of sparkle and life to the beverage, which is a highly desirable characteristic everyone looks for.

### AIDS PRODUCTION

As carbonated water loses less gas while kept at a cold temperature, uniform production is obtained by the bottler, which also aids the efficiency and helps maintain production results.

The cooling of the water can be accomplished by any of the several standard methods ordinarily used for water cooling. Usually the manufacturer's production volume plays an important part in determining the method to be used for water cooling.

### ESTIMATING NEEDS

Many small bottlers use a tank-type cooler or a standard instantaneous self-contained shell-and-tube or shell-and-coil type cooler built to definite water capacities by its manufacturer.

As the entire water requirements must be estimated in advance, it is only necessary for the refrigeration engineer to ascertain the number of gallons of water needed per production hour, the temperature desired for the water when carbonated, and the temperature of the incoming supply of water.

## MILK, WATER COOLER PRODUCTION INCREASED

Electric milk coolers are rolling off assembly lines in Springfield, Mass., in a volume four times as great as the pre-war production rate, and average weekly output of drinking water coolers has doubled compared with pre-war figures, according to H. F. Hildreth, manager of the refrigeration specialties department of the Westinghouse Electric Appliance Division.

With this information, together with allowances for partial temperature rises in the water temperature going through the production of carbonating, bottling and capping, the engineer may easily select the proper sized self-contained water cooler by referring to the manufacturers' charts covering the capacity of the various sizes of coolers they manufacture.

### PROVIDE FOR PEAKS

In all cases, it is desirable to provide equipment with reserve or surplus capacity to take care of unusual or peak load requirements; also, thought should be given to the possibility of normal plant expansion as the business grows.

In most instances it is advisable to estimate refrigeration requirements with enough capacity to furnish water at temperatures ranging from 34 to 36 F. Water at this temperature range will enable the carbonation of carbonated water with from 3.6% to 4% carbonation at bottle pressures under 20" gauge.

### LARGE VOLUME PLANTS

Most bottling equipment should operate safely and efficiently at this pressure range, with relatively small loss from bottle breakage.

In large bottle plant operations water cooling in large volume is obtained through use of Baudelot or open type tube coolers, tray type coolers, large, especially designed shell-and-tube coolers and sometimes by circulating brine tank-type coolers.

### NEW DEVELOPMENTS

Recently carbonator manufacturers have brought out production carbonators with water coolers built into the unit, which pro-

He predicted that by fall production will be raised to a rate 12 times that of the pre-war period.

Milk coolers are built in four cabinet sizes that can handle three, four, five or six standard 10-gallon milk cans. The cooling equipment is built as a single unit so it can be easily replaced during a servicing operation. "Drop-in" cooling units are sold separately to farmers who already own cabinets with adequate insulation.

vides an efficient, space-saving method of incorporating these two important operations into one piece of equipment.

The Baudelot type unit consists of refrigeration tubes set in a vertical position. The water flows over the surface of the tubes and is cooled very rapidly in contact with the cold tube surfaces. This type cooler is very similar to the tube-type coolers used by large dairies to cool milk.

The principal objection to the use of these coolers is the additional work required to keep the cooler surfaces clean and free from foreign matter, because of the open construction of the cooler.

### CLEAN WATER ESSENTIAL

One of the most important requirements in a bottling plant is to see that the water is clean and pure at all times. Usually filters, strainers and purifiers are used in the cold water line to insure clean water, free from any foreign matter, being delivered to the carbonator. This is a matter of prime importance.

The problem of pure water is considerably less complicated with self-contained water coolers, tank-type coolers and shell-and-tube coolers. However, it is very essential that coolers of this type have provision for draining off the water for cleaning from time to time.

*Editor's Note: Part II of the chapter on "Cooling Water for Carbonated Beverages", which will appear on these pages next month, will include a specific example of load figures and calculations for one typical job of this type. Be sure to watch for it.*

# Eston

## Refrigerants Have These ADVANTAGES

### At No Extra Cost To You!

①

Lowest moisture content.

②

Individual cylinder tests and factory guarantees.

③

Banded cylinders for easy identification.



Blue band—

**SULPHUR DIOXIDE**

Red band—

**METHYL CHLORIDE**

Also—

**METHYLENE CHLORIDE**

and **FREON 11-12-22-113**

Eston Refrigerants are sold exclusively through recognized jobbers and distributors.

Formerly  
Pittsburg Chemical Co.

# Eston

## CHEMICALS, INC.

3100 E. 26TH ST., LOS ANGELES 23, CALIF.



**WHO—WHERE—WHAT...**  
Continued from page 65

Freezer trucks; locker room ladders; key cabinet; baskets.

**WHO will be there—**

C. F. Mohr, partner; H. C. Sagie, assistant.

**MONSANTO CHEMICAL CO.,  
MERRIMAC DIVISION  
SPACE 608**

**WHAT** products will be shown—  
"Santocel" insulation.

**WHO will be there—**

H. J. Heffernan, assistant general manager of sales; F. Faxon Ogden, manager, chemical sales development; Vincent DiMaio, special products engineer; Richard T. Clark, sales department.

**MUELLER BRASS CO.  
SPACE 428**



Paul Domke



Paul Craft

**WHAT** products will be shown—

Valves, fittings and accessories for mechanical refrigeration; copper pipe; solder type fittings and specialties.

**WHO** will be there—

Paul Craft, sales manager, jobbing division; Paul Domke, sales manager, refrigeration division; Elgin Parker, fabricated division; L. Parker, refrigeration sales department; Wm. Constable, manager, streamline pipe and fittings; and several sales representatives.

**KELVINATOR DIVISION,  
NASH-KELVINATOR CORP.  
SPACE 1001**



T. A. Farrell



C. T. Lawson

**WHAT** products will be shown—

$\frac{1}{8}$ ,  $\frac{1}{4}$ ,  $\frac{1}{2}$ , and  $\frac{3}{4}$ -hp sealed type condensing units;  $\frac{1}{4}$ ,  $\frac{1}{2}$ , and  $\frac{3}{4}$ -hp open type condensing units; beverage coolers; ice cream cabinets; home freezers; Kelvinator manufactured refrigeration parts.

**WHO** will be there—

T. A. Farrell, assistant general sales

## Parts for Coldspot Refrigerator Pumps

No. 501—Size No. 1 ('34)  $1\frac{1}{2}$ " Pump Valve Blade, \$1.50 set.  
No. 502—Size No. 2 ('35-'39)  $1\frac{1}{4}$ " Pump Valve Blade, \$1.50 set.  
No. 503—Size No. 3 ('35-'39)  $1\frac{1}{2}$ " Pump Valve Blade, \$1.50 set.  
No. 504—Size No. 4 ('35-'39) 1" Pump Valve Blade, \$1.50 set.  
No. 505—Check Valve Seat, \$.75 each.  
No. 506—Check Wafer, \$.10 each.  
No. 507—Check Valve Cage, \$.75 each.

No. 751—Drive Coupling, \$.22 each.  
No. 825—Dome Gasket, \$.13 each.  
No. 1001—Knock-out Tool for check valve seat, \$2.50 each.  
No. 1002—Drive-in Tool for check valve seat, \$2.50 each.  
Cat. No. 510—Main Seal Bearings for  $\frac{1}{2}$ " and  $\frac{3}{4}$ " shafts, \$2.00 each.  
Cat. No. 511—Main Seal Bearing Drive in Tools for  $\frac{1}{2}$ " and  $\frac{3}{4}$ " shafts, \$2.50 each.

**A. G. BATE**

1000 LANGHAM AVE., CAMDEN, N. J.

See your refrigeration wholesaler first for our products.  
If they cannot supply you, write us.

PHONE 4-6336-J

# IT'S TYLER FOR FOOD REFRIGERATION!



IN THE STORE!



IN THE HOME!

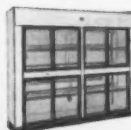
**TWO GREAT COMPLETE LINES**—commercial refrigerators for food stores, restaurants, hotels, florists, bakeries, taverns and bars; *Harder-Freez Home Lockers* for a tremendous domestic market, keep Tyler distributors and dealers profitably busy. *Talk to Tyler—at Cleveland—in October!*

Left, above—Tyler Open, Self-Service Meat & Dairy Case—and the Tyler Frozen Foods Display Case.

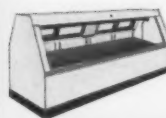


Left, below—Tyler Harder-Freez Home Locker.

Above—Tyler Reach-in Box.



Left—Tyler Wall Dairy Box.



Left—Tyler Meat Display Case.

**TYLER FIXTURE CORPORATION, NILES, MICHIGAN**

See TYLER at the All-Industry Refrigeration and Air Conditioning Exposition, Cleveland . . . . .

**BOOTH 1008**

manager; J. B. Legler, commercial and parts sales manager; C. H. Herrlich, contract division sales manager; G. R. Kingston, manager, commercial products development.

**NATIONAL ASSOCIATION  
OF REFRIGERATION  
CONTRACTORS**  
SPACE 1105

**NATIONAL GYPSUM CO.**  
SPACE 613

WHAT products will be shown—  
"Gold Bond Zerocel" insulation material  
for cold storage and locker plants.

**NATIONAL FROZEN FOOD  
LOCKER ASSOCIATION**  
SPACE 908

**NEVINGER MFG. CO., INC.**  
SPACE 317

**NICKERSON & COLLINS  
CO.** SPACE 104 & 106

**NORGE DIVISION,  
BORG-WARNER CORP.**  
SPACE 1005

NEW products to be introduced—  
20-ft. refrigerator.  
WHAT products will be shown—

"Water Boy" water cooler; Model NP-10 water cooler; HF-10 home freezer; HF-18 home freezer; WRC-50 window type room cooler; 1/2-hp hermetic condensing unit; 1/2-hp open type condensing unit.

WHO will be there—  
E. N. Guild, manager, refrigeration specialties department; R. E. Klinger, assistant to manager, refrigeration specialties department; J. H. Frohlich, central regional manager; E. C. Barrows, assistant advertising manager.

**OWENS-CORNING FIBERGLAS  
CORP.** SPACE 909

WHAT products will be shown—  
"Fiberglas" insulation.

**PACIFIC LUMBER CO.**  
SPACE 127

WHAT products will be shown—  
"Palco Wool" insulation.  
WHO will be there—  
Edric E. Brown, manager, bark products division; John H. Klass; Ray P. Klass.

**PACIFIC MFG. CORP.**  
SPACE 219

WHAT products will be shown—  
1/2-hp plug-in self-contained packaged air conditioner for individual rooms.  
WHO will be there—  
H. C. Troth, president and director; Clarice T. Harrison, vice president and director; Stephen C. May, vice president and general sales manager; Edward Watson, treasurer and director; Ernest J. Pribe, secretary and chief engineer; C. J. Ehlert, purchasing agent; John R. Farmer, product engineer; W. G. Mason, production superintendent.

**PEERLESS OF AMERICA, INC.**  
SPACE 702 & 704



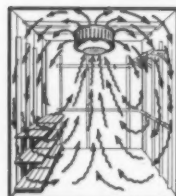
M. W. Knight

WHAT products will be shown—  
Flash coolers; 3-in. fin coils; off-center coils; VL valves; capacity boosters; cube makers, finned and plain; "Thermek" heat transfer surface for air conditioning and heating.

WHO will be there—  
M. W. Knight, assistant to president and general sales manager; W. A. Hon-eychurch, assistant general sales manager; J. M. O'Connor, engineer; and the following district representatives: Carl E. Johnson; H. D. Weeks; David Snow; F. M. Eversden; Austin L. Brown; F. C. Evans; R. L. Williams; Denver Smith.

**PENN BRASS & COPPER CO.**  
SPACE 1210

WHAT products will be shown—



Uniform distribution  
Out of the way location

The **KRAMER**

# **RADIAL COOLING UNIT**

The Kramer Radial Cooling Unit is suspended from the ceiling where it does not interfere with usable space. Cool air, discharged radially from around the complete circumference of this unit, mixes with the warm air at the ceiling of the refrigerator as it spreads and descends resulting in a minimum of temperature and humidity variation within the refrigerator.

Accurate ratings and easily used Rapid Selection Tables assure adequate refrigeration and high humidities.

Write for Catalog R-142-R1

No. 13

**KRAMER TRENTON CO.**  
HEAT TRANSFER EQUIPMENT  
TRENTON 5 • NEW JERSEY

"IT'S THE  
COILS THAT COUNT"  
KRAMER

Seamless brass and copper tubing; "Papco No. 400" flare tools for refrigeration purposes.

WHO will be there—



R. K. Wilks

R. K. Wilks, sales manager; P. S. Fackler, sales department; six district representatives.

SPECIAL activities planned—

Sales meeting of all sales representatives on October 30.

**PENN ELECTRIC SWITCH CO. SPACE 125**



R. H. Luscombe



Albert Penn

NEW products to be introduced—  
A new line of refrigeration controls.

WHAT products will be shown—

Temperature and pressure refrigeration and air conditioning automatic controls; water regulating valves.

WHO will be there—

Albert Penn, president; M. E. Henning, vice president and general manager; R. H. Luscombe, sales manager; K. W. Cash, assistant sales manager; John R. Netedu, advertising manager.

**PERFECTION REFRIGERATION PARTS CO. SPACE 220**

WHAT products will be shown—

Water regulating valves; compressor replacement parts.

WHO will be there—

D. H. Daskal, president; S. R. Wolff, vice president; S. Ellison, purchasing agent.

**H. A. PHILLIPS & CO. SPACE 1206**







WHAT products will be shown—

Float valves for ammonia and Freon refrigerants; refrigerant injectors and distributors.

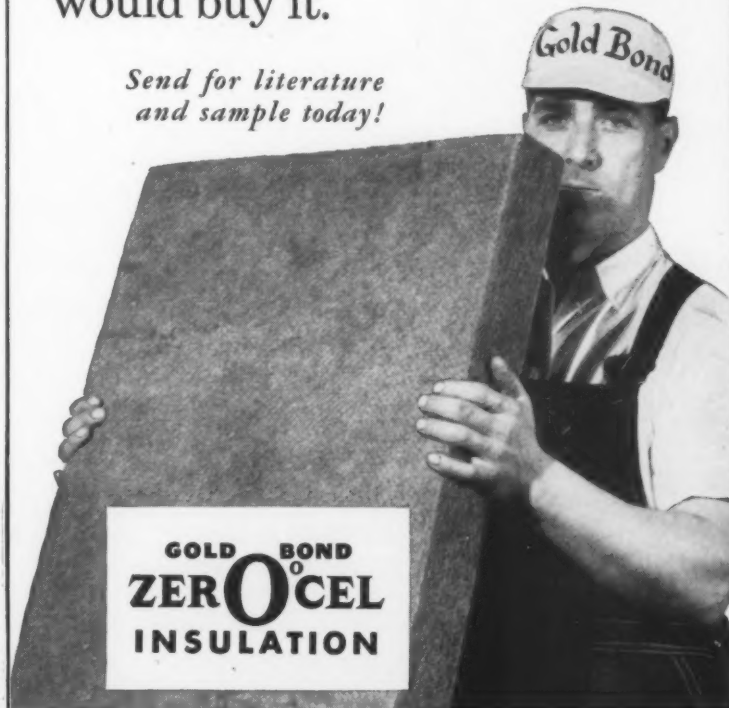
WHO will be there—

E. Grant Phillips, shop superintendent; James Filipek, assistant superintendent; George Weick and William Richards, engineering department.

## WANT A TRUE PICTURE OF ZEROCEL LOW-TEMP INSULATION?

So springy  it just won't settle. Floats and sheds water like a  You couldn't even set fire to it with a  It's light as a  It's repulsive to  and other vermin. Costs so little even a  would buy it.

*Send for literature and sample today!*



**NATIONAL GYPSUM COMPANY, BUFFALO, N. Y.**

**POLAR HARDWARE CO.**  
**SPACE 124**

WHAT products will be shown—  
Commercial refrigerator hardware.  
WHO will be there—  
George Blumenthal; S. H. Blumenthal.

**QUICK FROZEN FOODS**  
**SPACE 217**

**QUILLEN BROS.**  
**REFRIGERATOR CO.**  
**SPACE 1011**

WHAT products will be shown—  
Model 10 "Home-Freezer" unit; 6-ft. self-serve delicatessen case.

WHO will be there—  
Clarence A. Quillen; Stanley C. Bell, general manager; Frank A. King, sales promotion; and the following regional sales directors: J. W. Walker, Jr.; Wm. H. Durham; Arnold Gannaway.

**RAMSEY-BENNETT CO.**  
**SPACE 318**

NEW products to be introduced—  
"Kold-Safe" home and farm freezers.  
WHO will be there—  
R. W. Bennett, sales manager and partner; Fred T. Ramsey, general manager and partner; E. R. Ramsey, service manager and partner; T. R. Eberwine, assistant sales manager.

**RANCO, INC.**  
**SPACE 324 & 326**



R. R. Dunlop



G. E. Graff

WHAT products will be shown—  
Household refrigeration controls; commercial refrigeration controls.

WHO will be there—  
G. E. Graff, sales manager; C. M. Spielman, W. H. Stanley, and M. S. Vidis, sales department; and the following manufacturers representatives: H. M. Laird, Philadelphia; A. C. Homeyer, New York City; H. M. Goldberg, Chicago; J. D. Merkle, St. Louis; C. E. Whipp, Ann Arbor, Mich.; E. V. Dunbar, Atlanta; F. G. Slagel, Los Angeles.

**REDMOND CO., INC.**  
**SPACE 221**

WHAT products will be shown—  
"Micromotors," small fractional horsepower electric motors in sizes up to 1/20 hp.; blowers; speed controllers.

WHO will be there—  
Glenn Baumhardt, vice president in charge of sales and engineering; Wilfred Fox, advertising manager.

**REFRIGERATION PUBLICATIONS, INC.**  
**SPACE 708**



Irving Hexter

WHAT products will be shown—  
The Refrigeration Industry magazine; La Industria de Refrigeracion y Acondicionamiento de Aire (Spanish edition of The Refrigeration Industry.)

WHO will be there—  
Irving B. Hexter, president; Lester P. Aurbach, vice president; Theodore T. Quinn, editor; James R. McCallum Jr., associate editor.

**REFRIGERATION EQUIPMENT WHOLESALERS ASSOCIATION**  
**SPACE 607-A**

**THE REFRIGERATION INDUSTRY**

See AIRSERCO Products in action at  
The Cleveland Exposition, Booth No. 319



**AIRSERCO PRODUCTS**

**HELP THE SHOP AND SERVICE MAN**  
**Solve Any Refrigeration Problem Faster**



**Starter - Analyzer**  
**MODEL EJ**

A "most" service instrument that starts up defective compressor units without tearing apart the motor assembly. Starts both hermetic and open-type units up to 1/2 h. p. under actual working conditions—and the Analyzer may be left on the job for emergency service pending later repairs. Has 56 starting combinations.



**3-Weigh Holder**  
**MODEL 3WA**

An all-around shop-use device that correctly indicates refrigerant charge for both vapor and liquid charging, and eliminates the tank-filling hazard. This valuable time- & labor-saving unit has aided hundreds of service men to standardize their service techniques.



**Thermostat Tester**  
**MODEL A100**

A precision pocket-size Tester that detects and analyzes thermostat defects without removing the control from the cabinet. Quickly indicates cut-in and cut-out temperatures and saves blind tampering with the thermo controls. Standard for servicing all makes of refrigerators.

See your lobbyist for information on the complete Airserco line  
Write for descriptive literature



**AIRCRAFT SERVICE COMPANY**  
485 MELWOOD STREET PITTSBURGH 13, PA.



## REFRIGERATION APPLIANCES, INC. SPACE 118

WHAT products will be shown—

Unit coolers; fin coils; air conditioning units.

WHO will be there—

E. Niederer, president; Hugh D. Smart.

## REFRIGERATION ENGINEERING CO. SPACE 1207

NEW products to be introduced—

Upright home and farm freezer with 40-cu.ft. capacity.

WHO will be there—

F. H. Kaup, president. Shirley Rolfs, home economist, also will be present in this booth and will display her book "Freezing Foods at Home".

## REFRIGERATION SERVICE ENGINEERS SOCIETY SPACE 607

## ROTARY SEAL CO. SPACE 311



Charles Muller

Walter Meyer

WHAT products will be shown—

Seal replacement unit as used by refrigeration service engineers; "custom-built" seals as furnished to manufacturers of refrigeration equipment.

WHO will be there—

Charles Muller, vice president; Walter Meyer, vice president.

## SAFE-WAY FOOD LOCKER Co. SPACE 123

WHAT products will be shown—

"Broadview" and "Aristocrat" models of frozen food lockers.

WHO will be there—

W. H. Cummings, president; M. S. Anzel, vice president; J. H. Scofield, director of sales.

SPECIAL activities planned—

Open house in the company's Carter Hotel suite for its dealer organization.

## SALEM ENGINEERING CO. SPACE 320

NEW products to be introduced—

Working model of "Salematic" continuous freezing mechanism for commercial food packing.

WHAT products will be shown—

Working model of automatic locker plant.

WHO will be there—

F. A. Haag, sales manager; J. K. Stark, sales supervisor; J. K. Rawshorne, refrigeration engineer; and the following sales engineers: Myron Van Etten, J. I. DeWinton, C. B. Wright, R. L. Quigg.



MR. HOME FREEZER MERCHANT:

You Can Answer  
*All* of these FROZEN  
FOOD  
PACKAGING QUESTIONS!



LET **ZER-O-KIT**  
DO THE JOB!

Close your freezer cabinet sales by showing your customer the ZER-O-KIT. It's the complete answer to all of the packaging questions your freezer buyer will ask.

The ZER-O-KIT contains a complete assortment of protective packaging materials—plus illustrated information on their proper use. Furthermore, the sale of a ZER-O-KIT means an additional profit for you!

If you are an appliance dealer, contact your distributor for further information. If you are a distributor, contact us—we have interesting information for you.

**YORKVILLE PAPER CO., INC.**

431 East 77th Street • New York 21, N. Y.

W. H. Peters, W. E. Dennis, L. A. Bern-  
ower, A. H. Bechtel, C. F. Cobourn.

### SANITARY REFRIGERATOR CO. SPACE 1009

WHAT products will be shown—  
Farm and home freezers.

WHO will be there—

H. B. Miller, secretary and treasurer;  
F. J. Bommer, Jr., vice president; C. G.  
Hohensee, district sales manager.

### SCHNACKE, INC. SPACE 902

WHAT products will be shown—

Two cylinder, four cylinder, and eight  
cylinder refrigeration compressor units

with range of 5 to 50 hp.

WHO will be there—

F. C. Schnacke, president and general  
manager; Eddy Miller, assistant sales  
manager.

### SERVEL, INC., ELECTRIC REFRIGERATION DIVISION SPACE 901

WHAT products will be shown—

Complete line of hermetically sealed and  
belt driven condensing units from 1/8 hp.  
through 5 hp.

WHO will be there—

George S. Jones, Jr., vice president;  
W. J. Aulsebrook, sales manager; J. N.  
Schnur, assistant to sales manager; G. S.  
Eager, service manager; C. E. Ploeger,

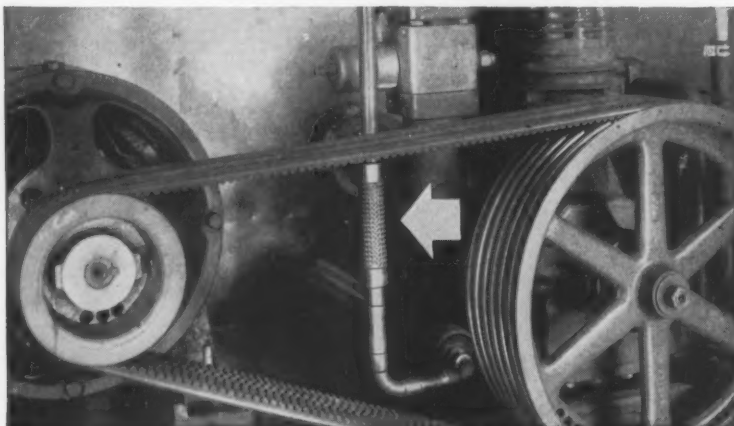


W. J. Aulsebrook



G. S. Jones

chief engineer; J. F. Zubrod, application  
manager; O. B. Lance, sales promotion  
supervisor; O. J. Dail, production super-  
intendent; H. F. Bell, eastern manager;  
C. L. Olin, western manager; all district  
managers and field engineers.



### SHELLMAR PRODUCTS CORP. SPACE 305

WHAT products will be shown—

"Fre-Z-Rap" locker paper; "Pliofilm"  
bags for frozen poultry; cellophane bags  
for packaging fruits and vegetables for  
freezing; printed cellophane over wrap  
for consumer packages of frozen foods.

WHO will be there—

R. L. Lee, general sales manager; T. W.  
Koch, advertising manager; J. H. Huse,  
division sales manager; F. C. Callans,  
Cleveland representative.

### SPIR-O-FREEZ CO. SPACE 1019

## REX *Vibra-Sorbers* Reduce Vibration Hazards

REX VIBRA-SORBERS—properly in-  
stalled—substantially reduce serv-  
icing costs. For REX VIBRA-SORBERS  
have the exceptional strength and  
flexibility needed to absorb pro-  
longed vibration and thus prevent  
the transmission of noises through-  
out the entire piping system.

In addition, REX VIBRA-SORBERS  
are pressure-tested to insure  
"refrigerant-tightness." This  
means greater protection against

leakage of valuable refrigerants.  
REX VIBRA-SORBERS of copper  
bearing alloy are normally used  
for Freon and Menthol. Units of  
steel alloys are available for am-  
monia. Thus, effective corrosion  
resistance is assured in all types  
of installations.

Let experienced C.M.H. en-  
gineers help solve your vibration  
problems. Write today for full  
information.

Flexible Metal Hose for Every Industrial Use



# CHICAGO METAL HOSE CORPORATION

MAYWOOD, ILLINOIS



Plants: Maywood and Elgin, Ill.

## Millions of Steel JIFFY CLIPS

Serving the Electrical Industry



Specify  
MINERALLAC  
HANGERS, CLIPS,  
STRAPS, BUSHINGS

Expert design, choice  
materials and con-  
trolled manufacture  
have built "top-service  
and longest life" into  
Minerallac Electrical Spe-  
cialties. That's why the elec-  
trical industry "prefers Miner-  
allac"... In steel and Everdur for  
hanging pipe, conduit, BX cable, etc.  
Send for new literature and prices.

MINERALLAC ELECTRIC COMPANY  
25 North Peoria Street—Chicago 7, Illinois

# MINERALLAC

THE REFRIGERATION INDUSTRY

**SPORLAN VALVE CO.**  
SPACE 431 & 433



H. F. Spoehrer

**WHAT products will be shown—**

Thermostatic expansion valves; automatic expansion valves; solenoid pilot controls; modulating pilot controls; refrigerant distributors; strainers.

**WHO will be there—**

H. T. Lange, president; H. F. Spoehrer, vice president and treasurer; W. T. Carmody, sales manager; W. F. Wischmeyer, chief engineer; W. L. Canfield, credit and office manager; M. D. McNaney, advertising manager; H. F. Shield, purchasing agent; C. C. Grote, eastern district manager; E. C. Fockler, Chicago district manager; and sales engineers J. T. Barry, J. E. Daniels, and W. A. Reichenbach.

**SPECIAL activities planned—**

Sales meeting for entire sales department plus four factory agents.

**A. E. STALEY MFG. CO.**  
SPACE 1219

**STANDARD REFRIGERATION CO.**  
SPACE 509

**WHAT products will be shown—**

Full line of heat transfer devices, including coils, condensers, and receivers.

**WHO will be there—**

Herman Goldberg; Harry Goldberg; Russell E. Cook; Willis Stafford; Richard Levin.

**STANGARD-DICKERSON CORP.**  
SPACE 504

**WHAT products will be shown—**

"Stanzero" home and farm freezer; ice cream cabinets; prime surface cold plates.

**WHO will be there—**

Victor J. Moss, director of sales; J. J. Moss, vice president; J. F. McCabe, secretary; Walter Raskin, treasurer; Rubin Raskin, vice president; and salesmen A. M. Rohr, G. B. Wilson, and S. W. Hanna.

**STERLING REFRIGERATION CO., INC.**  
SPACE 910

**WHAT products will be shown—**

Commercial air-cooled air conditioner; bus air conditioner; truck refrigeration unit.

**WHO will be there—**

*All this* **IN ONE**  
**DFN CARTRIDGE!**

**...means**  
**complete protection**  
**and quicker, easier servicing**

The DFN system gives you a three-way weapon against moisture, sediment and acid—saves you servicing time and prevents expensive "make-good" call backs due to freezeups, stuck valves and clogged system. The very compactness and completeness of the DFN cartridge makes it also the easiest to replace. For this cartridge is quickly inserted in the DFN shell without fuss, muss or loss of dehydrating strength.

The DFN cartridge stays on the line longer because it is quality-built throughout. The drying agent is thoroughly reactivated, hermetically sealed and mechanically

packed to provide complete dispersion of the refrigerant. Multiple layers of bronze wool, wool felt and strainer hold more sediment without pressure drop, and filter to minute size. Ask your distributor or write us for catalog R-7. McIntire Connector Co., 257 Jefferson St., Newark 5, N. J.

Be sure to visit Booth 611  
at the All-Industry Show,  
Cleveland, Oct. 29-Nov. 1.

**MECHANICAL REFRIGERATION**

The  
Watchdog  
of the  
Nation's Food  
Supply



Coils for Refrigeration  
Coils for Air Conditioning  
Air Conditioning Units  
Humi-Temp Forced Convection Units  
Polished Aluminum Dissem-inator Pans  
Steel Plate Coils  
Evaporative Condensers  
Industrial Coolers  
Water Coolers

**LARKIN COILS**  
519 Memorial Dr., S.E.  
ATLANTA, GA.

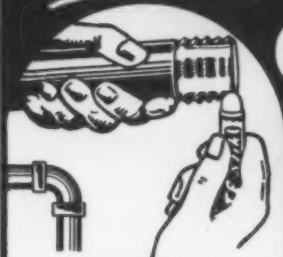


DEHYDRATORS • STRAINERS



FILTERS • NEUTRALIZERS

# NOW-PIPE JOINT COMPOUND in Stick Form



## NO LEAKS!

Just rub 3 or 4 strokes across pipe threads. It spreads and fills threads when turned.

FOR ALL THOSE PIPE INSTALLATION AND REPAIR JOBS

Always Ready For Instant Use

ECONOMICAL  
HANDY . . . CLEAN

Tested and Fully Approved by Independent Laboratories and Industry.

NO MESS  
NO BRUSH  
NO WASTE

ASK YOUR  
DEALER OR  
WRITE US

## Note these FEATURES

- ★ Withstands Freon, methyl chloride, butane, propane and other refrigerants, oil, air, water, brine, etc.
- ★ Lubricates and completely seals pipe joint threads, nuts, bolts, gaskets, turnbuckles, etc.
- ★ Contains no lead. Contains no injurious ingredients.

*Lake Chemical Company*

616 N. WESTERN AVE.

CHICAGO 12, ILLINOIS

Patented Reg.  
U. S. Pat. Off.

Copr. 1945  
Lake Chemical Co.



# STANGARD

*Prime Surface*

## COLD PLATES

For Maximum  
Refrigerating Efficiency



## THE STANGARD-DICKERSON CORP.

46-76 Oliver Street • Newark 5, N. J.

STANGARD KNOWS REFRIGERATION

Copyright 1945 by The Stangard Dickerson Corporation

George W. Carroll, president; Elvin James, vice president; Allen Trask, director of engineering; James Goggins, production manager.

SPECIAL activities planned—  
Meeting of board of directors to chart future course for company.

## SUPERIOR VALVE & FITTINGS CO. SPACE 131



J. S. Forbes



W. A. Sigfried

WHAT products will be shown—  
Line valves; heat exchangers; driers; fittings.

WHO will be there—  
J. S. Forbes, president; K. M. Newcum, vice president in charge of engineering; W. A. Sigfried, vice president in charge of sales; E. L. Nickeson, assistant to sales manager; R. C. Robertson, eastern district office manager; I. A. Wilson, Chicago office and warehouse manager; K. W. Rose, west coast representative; W. H. Cody, southwestern representative; J. P. Bowen, southeastern representative.

## TECUMSEH PRODUCTS CO. SPACE 710



F. K. Smith



L. W. Larsen

WHAT products will be shown—  
Full line of conventional and hermetic condensing units and compressors.

WHO will be there—  
C. M. Brown, general manager; F. K. Smith, sales manager; L. W. Larsen, assistant sales manager; F. G. Purcell, service manager; members of field sales force.

## TENNEY ENGINEERING, INC. SPACE 310

NEW products to be introduced—  
Model TS-1 thermostatic expansion valve.

WHAT products will be shown—  
Unit cooler; "Kwik-Freeze" ice maker; finned coils.

WHO will be there—  
Montroe Seligman, president; Cleve Sewell, vice president; William Collins; Saul S. Schiffman.



**TEMPRITE PRODUCTS CORP.**  
**SPACE 327**



J. J. Goodwin



Lud Emde

WHAT products will be shown—  
Water coolers; beverage coolers; water carbonator; refrigeration accessories.

WHO will be there—

Lud Emde, vice president and general manager; James J. Goodwin, advertising manager and eastern sales manager; Owen F. Nelson, western sales manager; Earl Jennings, service manager; J. W. Archibald.

**TEXAS CO.**

**SPACE 206**

WHAT products will be shown—  
Operating demonstrations of "Texaco Capella" oil and "Texaco Regal Starfak No. 2" grease.

WHO will be there—

N. M. Aycock, assistant manager, sales promotion division; W. B. Pilkey, Jr., Cleveland.

**THERMAL CO., INC.**

**SPACE 409**



H. W. Small

WHAT products will be shown—

No products will be displayed by this wholesaler of refrigeration equipment. Instead, the booth will be arranged to serve as a meeting place for visitors from this St. Paul company's trade area, with both message and telephone service available.

WHO will be there—

H. W. Small, president; E. F. King, exec. vice president; H. F. Wallace, vice president; W. H. Snyder, manager, Des Moines branch; John Eagle, manager, Milwaukee branch; A. D. Forbes, manager, Great Falls, Mont., branch; C. H. Moser, manager, Cedar Rapids, Iowa, branch; H. H. Hauer, application engineer.

**E. W. TWITCHELL, INC.,  
PACKAGING DIVISION**

**SPACE 309**

WHAT products will be shown—

"Paksure" frozen food packings, including cellophane lined containers, cellophane bags, marking sets, and locker papers.




Striking beauty matches brilliant performance in the new OASIS Electric Water Cooler. For beauty, note the deep ebony tones of the neatly recessed base . . . the rich walnut-bronze finish of the handsome, corner-louvered cabinet . . . the silvery luster of the new stainless steel top. And for pleasant, sanitary, dependable drinking ease, you'll like the new feather-touch control on the splash-proof "angle-stream" EBCO bubbler . . . the quiet-running mechanism and super-capacity condenser. The new OASIS tops EBCO's 20 years of Electric Water Cooler leadership. Write for details!



See you at the  
**REMA Show**  
Cleveland, Ohio  
Oct. 29  
- Nov. 1  
**EBCO  
BOOTH  
201**

Oasis Cooler Division **The EBCO Manufacturing Co.**  
401 W. Town Street  
Columbus 8, Ohio

# NOW!

## FORGED FLARE NUTS AND FITTINGS

Complete Stock  
Prompt Shipment

# Electromatic

2100 INDIANA AVE  
CHICAGO 16 ILLINOIS

WHO will be there—

W. W. Russell, manager, frozen food department.

#### **TYLER FIXTURE CORP.**

**SPACE 1008**

NEW products to be introduced—

Model PFB open style self-service frozen foods display case; HC-12 "Harder-Freez" farm and home locker of 12-cu. ft. capacity.

WHAT products will be shown—

Model P10DS 10-ft. double duty meat display case; P402 open style self-service dairy case; P47 reach-in box of 47-cu. ft. capacity; TB6 6-ft. underbar beverage cooler.

WHO will be there—

R. L. Tyler, president; J. W. Krall, executive vice president; Paul Jackel,



J. W. Krall



R. L. Tyler

sales manager; J. B. Hennon, sales promotion manager; Sam D. Vander Weg, manager, Cobleskill, N. Y., plant; E. A. Danforth, engineer.

#### **UNITED CORK COMPANIES**

**SPACE 133**

WHAT products will be shown—

Cork board; cork pipe covering; composition cork; granulated cork.

WHO will be there—

Edwin J. Ward, president; H. H. Bose, vice president; E. Krause, secretary; C. E. Schoeneman, Cleveland district manager.

SPECIAL activities planned—

Central west sales meeting.

#### **UNITED FRIGUATOR ENGINEERS**

**SPACE 429**

WHAT products will be shown—

Stainless steel refrigerated display case; stainless steel direct draw beer dispenser.

WHO will be there—

Ray W. Neuman, proprietor; Al Slatin, Chicago sales manager.

#### **UNITED REFRIGERATOR MFG. CO.**

**SPACE 511 & 513**

WHAT products will be shown—

Meat display cases; commercial reach-ins; dry beverage coolers; direct draw beer dispensers; two-temperature walk-in coolers; commercial drainboards; cocktail units.

WHO will be there—

R. S. Wieding, president; Fred J. Payson, assistant sales manager; E. A. Karp, credit manager; K. W. McKenzie, chief engineer; Fred M. Gibbs, purchasing agent; D. W. Foss, assistant to president;

M. S. Olsen, advertising department director; and district managers: J. C. Battles, Al O. Stein, H. B. Weeks, and C. W. Koerner.

**A** MINIAURE frozen food locker plant, complete with refrigeration and processing equipment, chill rooms, lockers and tracks, will be exhibited by the Frozen Food Locker Manufacturers and Suppliers Association at the Fourth All-Industry Refrigeration and Air Conditioning Exposition in Cleveland, October 29 to November 1.

Measuring four by seven feet, the model locker plant is an exact replica of a modern locker plant in design, construction, and equipment. Open at the top to give spectators a birds-eye view of locker plant operations, the model shows the various departments and sections of the modern locker plant and their use in the processing, freezing and storage of meats, fruits and vegetables.

#### **UNIVERSAL COOLER DIVISION, INTERNATIONAL DETROLA CORP.**

**SPACE 129**

WHAT products will be shown—

Refrigeration condensing units.

WHO will be there—

F. S. McNeal, general manager; Perry Hall, chief engineer; J. E. Maloney, assistant general manager; T. S. Pender-

# HIGH SPEED

# LOW COST



See Our Display  
at the  
Cleveland Show  
Booth 426

## **WATER and LIQUID COOLING ... with the HEAT-X CAST ALUMINUM COOLERS**

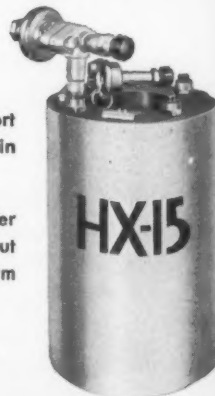
HEAT-X Coolers are supplied in various capacities so that your precise requirements will be fulfilled.

HEAT-X Features: No freeze-up damage . . . More BTU's per watt . . . No short cycling . . . Small refrigerant charge . . . Assured sanitation . . . Operates in any position . . . Small space required . . . Low initial cost . . . Long life.

The industry has waited and hoped for a lowside product such as we offer combining top performance and little cost. It is an instantaneous cooler, but with block holdover sufficient to prevent short cycling and to maintain uniform outlet water and liquid temperatures with intermittent flow.

*Write at once for Heat-X Engineering Specifications and Capacity Tables*

Orders Promptly Shipped



## **THE HEAT-X-CHANGER CO., INC.**

**415 Lexington Avenue, New York 17, N. Y.**

**Brewster, N. Y.**



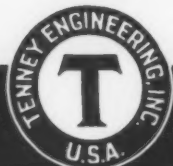
WHO IS IT? SOME MOVIE STAR?  
NO THE NEW TENNEY VALVE IS ON DISPLAY!

Step right up, gentlemen, and see  
the only Thermostatic Expansion  
Valve in the world without a  
tail. Sure is something to see.

Better come, folks, and see  
THE VALVE on view at Booth  
310. There's a big display to  
show you how it works.



You are cordially invited to visit Booth 310  
at the Cleveland Public Auditorium,  
October 29 to November 1. See the Tenney  
Ice Maker, Unit Cooler, Fin Coils and THE  
Valve. There will be literature available  
and engineering personnel will be in  
attendance to answer your questions.  
Write for Bulletin TV-46 on Valve or  
Catalog CD-46 on other Tenney products.



## TENNEY ENGINEERING, INC.

26 Avenue B • Newark 5, N. J.

Telephone: BIGELOW 8-3905

Manufacturers of Automatic Temperature, Humidity and Pressure Control Equipment

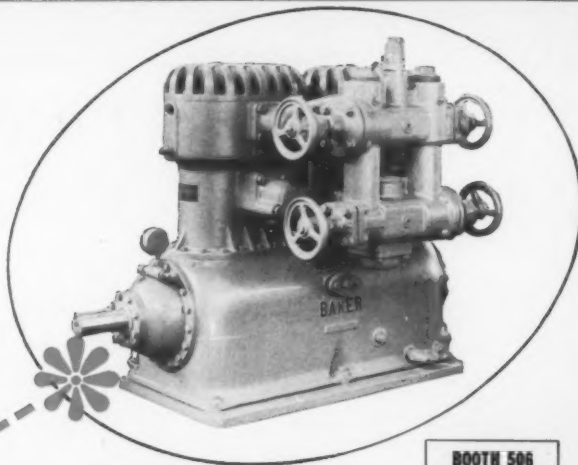
## Baker PROMISED...AND NOW

...at the 'All-Industry Show in Cleveland  
Oct. 29th thru Nov. 1st

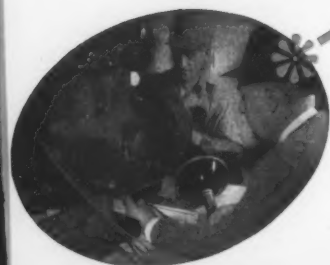
Baker presents the new Series "F" Compressors

*Greater Capacity  
with Smaller Size*

No longer a laboratory dream.  
Production scheduled for 1947.



BOOTH 506  
ALL-INDUSTRY  
SHOW



The Series "F" is the  
result of months of inten-  
sive laboratory testing.

# Baker

ICE MACHINE COMPANY, INC., OMAHA

MANUFACTURERS OF REFRIGERATION AND AIR CONDITIONING EQUIPMENT SINCE 1905



T. S. Pendergast



W. W. Higham

gast, director of sales; W. W. Higham, director of engineering; Jack Danner, advertising and sales promotion manager; C. T. Clyne, factory manager.

## UNIVERSAL ZONOLITE INSULATION CO.

SPACE 510

## UNITED STATES AIR CONDITIONING CORP.

SPACE 1204

WHAT products will be shown—  
"Kooler-aire" packaged air conditioning system; unit air conditioner; evaporative condenser; direct expansion coil; unit cooler.

## UTILITIES ENGINEERING INSTITUTE

SPACE 1107

WHO will be there—

E. P. Sorensen, president; W. H. Hoehne, vice president; F. Dillon Burroughs, educational director; N. T. Hall, director of publications; H. E. Clarkson, publications staff.

SPECIAL activities planned—  
Publication of the "Exhibition Review," a tabloid newspaper, during the show.

## UTAH WAX REFINING CO.

SPACE 905

WHAT products will be shown—  
"No-Air Wrap", a thermoplastic coating for frozen foods.

WHO will be there—  
M. E. Wallis, general manager; Byron C. Millet, field supervisor; Bob Orme, field technician.

## VIRGINIA SMELTING CO.

SPACE 116

WHAT products will be shown—  
"Virginia" refrigerants and cylinders; "Lethalair" aerosol insecticide, demonstrating the solenoid system of application and displaying the 5-pound container-applicator.



A. H. Eustis



F. A. Eustis



R. H. Israel

WHO will be there—  
A. H. Eustis, president; F. A. Eustis, secretary-treasurer; Charles W. Johnston, vice president; A. K. Scribner, general manager; R. H. Israel, sales manager, refrigeration department; Robert LeBaron, director of research and development; H. T. Palmer, sales department; Stan Soneson, technical service department; J. R. Eldridge, N. Y., district manager; F. W. Binns, northeast district manager; W. B. Arbuckle, Houston district representative; W. C. Dever, Detroit district representative; E. V. Dunbar, Atlanta district representative.

## WABASH MFG. CO.

SPACE 424

WHAT products will be shown—  
Dehydrators; strainers; capillary tubes; capillary tube heat exchangers; speed couplers; charging hose.

WHO will be there—  
E. W. Mack, general manager; Marty Cahenzli, engineer and sales manager.

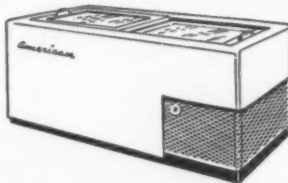
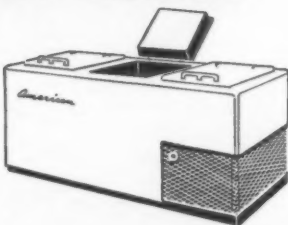


## ... See them at the ALL INDUSTRY SHOW

### HOME, FARM and COMMERCIAL FREEZERS

You'll say they're "naturals" when you see them . . . these American Beauties! The farm and home 15 cu. ft. cabinet is equipped with 3 lift doors; the commercial model, designed for self-service display use, has two glass "finger-touch" sliding doors, so that commodities may be easily seen by shoppers. Aluminum construction, with dual-purpose quick-freeze and storage compartments. Cabinet sizes: 8, 15 and 22 cu. ft.

Don't forget to inquire about the complete 1947 AMERICAN line, including our ARID-AIR Bottle Coolers and the new Extensional Walk-In Coolers in wood and metal.



Early delivery now being made on many Cooler and Freezer models. Write or wire—

# AMERICAN

## REFRIGERATOR and MACHINE, INC.

2700 UNIVERSITY AVE. N. E., MINNEAPOLIS 13, MINN.



# WEATHERHEAD CO.

SPACE 301



F. J. Rocks

J. A. Strachan

WHAT products will be shown—

Packless valves; globe valves; dehydrators; strainers; manifold assemblies; fittings; accessories.

WHO will be there—

J. A. Strachan, sales manager; F. J. Rocks, sales manager, jobbing division; Otto Wilk, assistant sales manager, jobbing division; C. H. Boylan, service engineer, refrigeration division.

# WEBER SHOWCASE & FIXTURE CO., INC.

SPACE 222

WHAT products will be shown—

"Roll-A-Door" ice cream and frosted food cabinets, Models D-1205, D-2005 GS, and D-2805 GS.

WHO will be there—

Don Mack, sales promotion and advertising

ing manager; E. V. Williams, vice president and manager of ice cream and frosted food cabinet division; district managers: C. M. Coleman and Fred Schulz.

# WESTINGHOUSE ELECTRIC CO.

SPACE 204

WHAT products will be shown—

Water cooler models US10B, WA4D, LB4; milk cooler cabinet model BM3S with ¼-hp. drop-in unit; drop-in milk cooler model B33CU.

WHO will be there—

H. F. Hildreth, manager, refrigeration specialties department; H. A. Klug, merchandise manager, refrigeration spe-



H. F. Hildreth

cialties department; H. C. Bourns, refrigeration specialties supervisor, central district.



# The Low-Temp Patrolmen!

THAWZONE and TRACE are two "musts" in protecting refrigeration systems and keeping them functioning perfectly with the minimum of attention.

THAWZONE, in new, reconditioned or old systems, has a two-fold purpose: (1) To destroy moisture already present and causing trouble, (2) as a safeguard against future trouble in systems now functioning satisfactorily. THAWZONE also removes other trouble-causing elements such as oxygen (air) and acids.

TRACE spots leaks . . . present or future. Its vivid stay-red color indicates them plainly. Add it to any refrigeration system and be ready for the red signal.

See us at the  
4th ALL-INDUSTRY  
REFRIGERATION AND  
AIR-CONDITIONING  
EXPOSITION  
BOOTH 122  
\*  
CLEVELAND  
OCT. 29 TO NOV. 1

**HIGHSIDE CHEMICALS COMPANY**  
195 VERONA AVE., NEWARK 4, N. J.

**QUICKEE**  
WATERLESS  
HAND  
CLEANER

TIME-  
SAVING!  
EASY  
TO USE!  
BETTER!  
ECONOMICAL!

REMOVES  
**GREASE, GRIME, PAINT,  
WITHOUT WATER!**

- ★ GENTLE—not injurious to skin
- ★ KEEPS HANDS SOFT—fortified with Lanolin and Vegetable Oils
- ★ QUICK ACTING—guaranteed satisfaction

NOW in our own building to keep up ever increasing demand.

**FREE  
SAMPLE**

TUDOR CHEMICAL SPECIALTIES, INC.  
Dept. R, Tudor Bldg.  
229 W. 179th St., New York 53, N. Y.

Send me a Free Sample of Quickee

Name.....  
Address.....  
City.....  
State.....

**GEORGE M. WESSELLS  
CO. SPACE 101**

WHAT products will be shown—  
"Modern Hostess" magazine for frozen food locker patrons; advertising and public relations material for the locker industry.

WHO will be there—  
J. Russell Calvert, vice president; Fred I. McCandlish, eastern representative; Wm. C. Buser, western representative.

**WHITE-RODGERS ELECTRIC  
CO. SPACE 213**

NEW products to be introduced—  
Automatic defrost control.  
WHAT products will be shown—  
Complete line of pressure and tempera-



L. F. Blough

Jack Searls

ture controls for industrial and commercial refrigeration.  
WHO will be there—

L. F. Blough, president; Jack Searls, sales manager; E. C. Robinson, advertising manager; P. L. Tolerton, central division manager; Ray Schmitz, Columbus district manager.

**WHITNEY BROS., INC. SPACE 1212**

WHAT products will be shown—  
Frozen food packaging materials.  
WHO will be there—  
Miss M. G. Jones, manager, frozen food packaging division; representatives: Ralph McLeod, Carl Horton, E. Ronald Gillis, William R. Milliot.

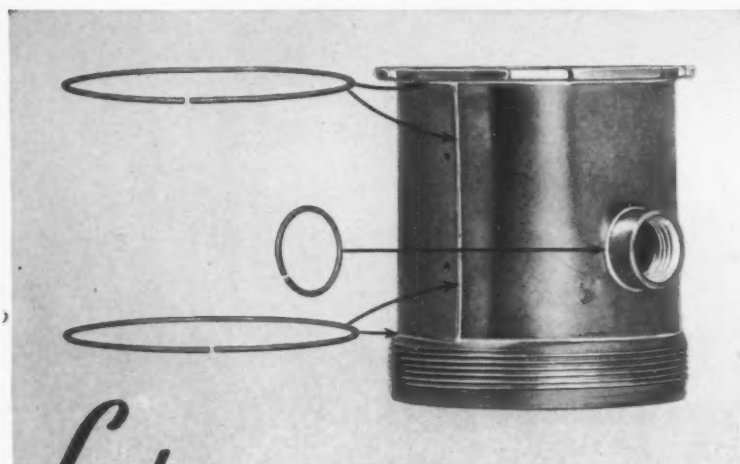
**WOLVERINE TUBE DIVISION SPACE 313**



W. H. Maxwell

J. A. Marshall

NEW products to be introduced—  
"Trufin" integral finned tube.  
WHAT products will be shown—  
Seamless copper and brass tubing in standard production sizes.



**Look WHAT THREE LITTLE  
RINGS OF EASY-FLO ARE DOING!**

Three little rings of EASY-FLO low-temperature silver brazing alloy make the thermostatic expansion valve spacer shown, which is used in electrical refrigeration equipment. Here's how they do it. . . The 18-8 stainless steel strip shell, spot welded to hold it, and four brass fittings (one inside) are assembled with rings of 1/32" EASY-FLO wire pre-placed, at the joints as indicated. . . Handy Flux is liberally applied. . . In two fast induction heating steps, the three rings make the 5 required joints—and produce a **leak-tight** assembly that has **one-piece strength** and the ductility to withstand any vibration, shock or temperature change the metals themselves can take.

Thousands of parts in the refrigeration and other industries are now fabricated by low-temperature EASY-FLO brazing with important savings in man-hours, machine-hours and metals. . . Good reasons why you should get the facts about EASY-FLO. . . **BULLETIN 12-A** will give them to you. Write for a copy today.

**HANDY & HARMAN**  
82 FULTON ST., NEW YORK 7, N. Y.  
Bridgport, Conn. • Chicago, Ill. • Los Angeles, Cal. • Philadelphia, Pa. • Toronto, Canada  
Representative: The Refrigeration & Air Conditioning Institute

We invite you to visit us at Booth  
No. 415 All Industry Refrigeration  
& Air Conditioning Expo-  
sition



**STANDS ON ITS RECORD**  
as

The Most Efficient Drying Agent in general use in the Refrigeration Industry.

The Moisture remaining in a gas after drying with DRIERITE amounts to only 0.005 milligrams per liter or 0.31 lbs. per million cubic feet.

Other products, claimed as drying agents, leave Six Times or More this amount of Residual Moisture in the system. (Bureau of Standards, R.P. 649.)

Meet us at the Show or write us for verification of these statements.

**W. A. Hammond Drierite Company**  
120 DAYTON AVE., XENIA, OHIO

WHO will be there—

W. H. Maxwell, general sales manager; J. A. Marshall, assistant general sales manager; H. A. Harty, advertising manager; D. W. Blend, factory manager; J. S. Rodgers, technical supervisor; R. C. Yantis, supervisor of air conditioning and refrigeration; W. P. Hill, product development supervisor; L. G. Fox, sales, special assignment; V. D. Steele, office sales manager; sales representatives: A. S. Kingerley and E. J. Campbell.

## YODER CO.

SPACE 1012

WHAT products will be shown—  
"Hubbell-Yoder" refrigeration plates.

## YORK CORP.

SPACE 604

NEW products to be introduced—  
Two frozen food cabinets, Models 350 and 165.

WHAT products will be shown—  
Model DER-10 "FlakIce" machine, in operation; Model 2 "Polar Flow" packaged low side unit; Model 75HW condensing unit; "Roller-Seal" freezer door; accessory equipment and supplies.

WHO will be there—

J. R. Hertzler, vice president and general sales manager; W. E. Landmesser, manager resale sales; D. C. Seitz, manager franchised distributor sales; J. L. Rosenmiller, manager accessory equipment and maintenance; W. S. Stair; J. Donald Smith; H. S. Yoder; H. L. Hupp; M. S. Lehair; C. C. Strauch; L. D. Wasson; L. B. Farwell; H. A. Brysselbout; Leon E. Kinley.

*Says*  
**GASKET  
JOE**



*You  
WON'T  
GET  
DINNERS  
AT THE  
RITZ  
LEAVING  
DOOR  
GASKETS  
ON  
THE  
FRITZ*

**JARROW PRODUCTS**  
420 N. LA SALLE ST., CHICAGO 10, ILLINOIS

## RSES PROGRAM . . .

*Continued from page 50*

Developments in Thermal Expansion Valves", speaker to be announced.

"Hermetic Units and the Service Engineer", L. W. Larsen, assistant sales manager, refrigeration division, Tecumseh Products Co.; "Preventive Maintenance of Air Conditioning Equipment", M. Goddard, Carrier Corp.; "Financing Your Business",

W. C. Irving; "Responsibilities of Servicing Equipment in the Low Temperature Field", E. T. Benson, engineer, Frigidaire Corp.; "Servicing Ammonia Compressors", Wm. G. MacBride, York Corp.

Under the guidance of the Cleveland chapter, all Ohio chapters of RSES are acting as hosts to the visiting delegates. All meetings and other events will be held at the Hollenden Hotel, official headquarters for the

**9** out of **10**\* service men prefer  
**DAVISON**  
*Refrigeration Grade*  
**SILICA GEL**



*They prefer it . . .*

because they've proved to themselves that it GIVES BEST RESULTS!

*They ask for it . . .*

by name because buying by brand name gives them PROTECTION!

*They get it . . .*

JOBBER EVERYWHERE STOCK IT . . . in factory-charged dehydrators and for refilling!

Join the 91% who are winning complete freedom from moisture troubles.

Ask for . . . and get . . . Davison Refrigeration Grade Silica Gel.

LOOK FOR THE CAN WITH THE BLUE LABEL

\*According to a recent nation-wide survey, 91% of the refrigeration service men who specified a brand named Davison's.

**THE DAVISON CHEMICAL CORPORATION**  
*Progress through Chemistry* **D** **BALTIMORE-3, MD.**

Be sure to visit the Davison exhibit—Booths 208 and 210—

4TH ALL INDUSTRY REFRIGERATION AND AIR CONDITIONING EXPOSITION

society during the Show period.

A chronological outline of the RSES program follows:

**SATURDAY—OCTOBER 26**  
2 to 5 p.m.—Business session.

**SUNDAY—OCTOBER 27**  
9:30 a.m. to 5 p.m.—Educational session.

**MONDAY—OCTOBER 28**  
9:30 a.m. to 12 noon—Educational session.  
1:30 to 5 p.m.—Visits to plants.  
8:30 p.m.—Annual banquet and dance.

**TUESDAY—OCTOBER 29**  
9:30 a.m. to 3 p.m.—Educational session.

### LOCKER PROGRAM . . .

*Continued from page 51*

ences, and state meetings.

Locker operators are cooperating with the manufacturers and suppliers of locker equipment in the presentation of a skit depicting the trials and tribulations besetting the locker plant operator. This skit, entitled "Frozen Scandals of 1946", was written and produced by Wayne Carver, editor of "The Locker Operator", and Ray Farquhar, director of FFLMSA.

All meetings and business sessions



*"The Seal of Approval"*

Write for Stock and Price List. Learn how you can save by eliminating "call backs".

**TEMPERATURE**  
*Control Devices*  
NEW HAVEN 15, CONNECTICUT

of the NFFLA will be held in the Theater of the Cleveland Municipal Auditorium, where the Show itself is being staged.

A brief outline of the association's schedule of activities follows:

**MONDAY—OCTOBER 28**  
4 p.m.—Business meeting—Theater, Auditorium.

**TUESDAY—OCTOBER 29**  
9:30 a.m. to 12 noon—General session—Theater, Auditorium.

**WEDNESDAY—OCTOBER 30**  
9:30 a.m. to 12 noon—General session—Theater, Auditorium.  
8 p.m.—"Frozen Scandals of 1946"—Music Hall, Auditorium.  
10 p.m. to 1 a.m.—Dancing—Arena, Auditorium.

**THURSDAY—OCTOBER 31**  
9:30 to 12 noon—General session—Theater, Auditorium.

**FRIDAY—NOVEMBER 1**  
9:30 to 12 noon—General session—Theater, Auditorium.

### "opportunity to obtain first-hand information"

Members of the National Frozen Food Locker Association have two main purposes in attending the All-Industry Exposition.

First: This is their seventh annual meeting, and the occasion affords the membership the opportunity to conduct Association business, coordinate activities within between the thirty-eight state locker associations affiliated in the organization, and to plan for the future.

Second: Owners and operators have a keen interest in modern construction, up-to-date equipment, and in new supplies. From that standpoint, the All-Industry Exposition will be of vital importance, affording them opportunity to obtain first-hand information and guidance from the leading firms of manufacturers and suppliers.

*Albert Guggedahl*  
Executive Secretary

### NEW REWA MEMBER

Palmer Supply Co., Tulsa, Okla., has been elected to membership in Refrigeration Equipment Wholesalers Association.

### ADMIRAL NAMES OUTLET IN ESCANABA, MICH.

Earle Appliance Distributors, Inc., Escanaba, Mich., has been appointed distributor of Admiral products in that territory. F. J. Earle is president of the company, and has been in the distribution field since 1909.

## THE MARKET PLACE

Rates: for "Positions Wanted" \$3.50 minimum, limit 25 words. For all other classifications \$3.50 minimum for 25 words, each additional word 10c; bold-face type or all capitals, \$6.00 minimum for 25 words, each additional word 15c; limit 50 words. Box addresses count as five words. All insertions are payable in advance.

(See Other Classified Ads on Page 104)

### FOR SALE

FOR SALE: 25, 34 and 42 case dry bottle coolers, refrigeration by direct contact cooling by cold plates, stainless steel tops and lids, complete with condensing units. Perlick 2 keg tap boxes complete with condensing units. Meat and bone cutter machines complete with 1 H.P. motors, ready for installation. Write box 7046, Refrigeration Industry.

For Sale—Dial Thermometers with tube 2 feet long and thermo-couple 10" long. Range -20° to 120° F. Special \$6.85. LELAND Co., Opportunity, Washington.

### NEW GALVANIZED PIPE COILS

New 1 1/4" Standard Galvanized pipe coils, suitable for refrigeration or air conditioning, threaded on both ends, 5" center, each coil has four straps flat iron to support coil. Consisting of the following. Very attractive prices.

20 - 3 ft. long, 12 sections—straight  
24 - 4 ft. long, 11 sections—straight  
21 - 5-6 ft. 11 sections—straight  
8 - 5 ft. long 15 sections—zig zag  
16 - 5-6 ft. long 17 sections—zig zag  
24 - 6 ft. long 17 sections—zig zag  
42 - 7 ft. long 15 sections—zig zag

### MARINE METAL & SUPPLY CO.

167 South Street New York 7, N. Y.

NATIONALLY KNOWN ICE CREAM CABINETS FOR IMMEDIATE DELIVERY—WITH OR WITHOUT MACHINES. 4, 6 or 8 holes. INQUIRE FRIGITEMP CORP., 931 BERGEN ST. BKLYN 16, N. Y.

### IMMEDIATE DELIVERY

20 cu. ft. all-steel glass top Freezers, Ice Cream, Frozen Food open and closed cabinets; Reach-ins, Wood and Metal Storage Boxes; Beverage Coolers; Air Conditioning Units; Motors 5-20 h.p.; etc. Frigitemp Corp., 931 Bergen St., Brooklyn 16, N. Y. Main 2-9093.

THE REFRIGERATION INDUSTRY



# CONTRACTORS

## CONTRACTOR STATUS 'MUDDLED' UNDER FAIR LABOR ACT

A court test may be necessary to clarify the position under the Fair Labor Standards Act of refrigeration contractors whose business is mostly commercial in nature, according to information gathered by the National Association of Refrigeration Contractors, Cleveland.

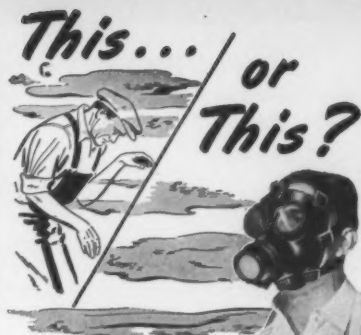
In reviewing the matter, NARC advises that "each firm should analyze its own operation and make its own decision. . . . The present situation is a very muddled one, and it apparently will take a court test to clarify it."

The Act specifies a minimum wage of 40¢ an hour and a 40-hour week with time-and-a-half for overtime in excess of 40 hours. However, the Act exempts "any employee engaged in any retail or service establishment the greater part of whose selling or servicing is in intrastate commerce." By U. S. Supreme Court decisions, firms who perform services for industrial or commercial concerns engaged in producing, mining, handling or in any manner working on goods for interstate commerce are subject to provisions of the Act.

But when a refrigeration contractor performs services for a firm whose business is wholly intrastate (such as groceries, florists or meat markets) the U. S. Dept. of Labor's wage and hour division still considers him subject to the Act, on the grounds that his concern does not come within the definition of a "service establishment".

From the definition mentioned above, there is no doubt that workers who do household refrigerator servicing do not come under the Fair Labor Standards Act; however, the work week governs, and any employee who, in a work week, does any amount of work on commercial jobs is not exempt from the Act, in the opinion of the Wage and Hour Division.

In its review of the Act NARC states that "in interpreting the Act this way, it might well seem that the Wage and Hour Division is going rather far afield, and it may take a court test to decide the issue on service establishments whose business is mostly commercial in nature, mostly intrastate, and for the most part firms whose business is intrastate."



## Better be SAFE with a CESCO Mask

• Don't take chances with hazardous refrigeration fumes. There's a way to be safe—use a CESCO Healthguard Mask.

**No. 605 FUME KIT**  
gives 3-way protection  
at lower cost



CESCO's Healthguard Fume Kit (No. 605) offers *triple protection* to refrigeration servicemen. Quick-change filter cartridges assure safety against ammonia, methyl-chloride and sulphur-dioxide fumes . . . *all in one convenient carrying case.*

The soft molded rubber face-piece of the fume mask, and the adjustable headgear assure a gastight, comfortable fit for every wearer. Large safety glass lenses give perfect visibility.

The CESCO Healthguard Kit provides *economical* protection because it is *moderately* priced.

Write for CESCO'S No. 605 Safety Bulletin for complete information

**CHICAGO EYE SHIELD CO.**  
2340 Warren Boulevard  
Chicago 12, Illinois



**CESCO**  
FOR SAFETY



One of the most modern refrigeration wholesaler warehouses in the country is the F. H. Langsenkamp Co.'s new South Bend (Ind.) location at 333 Hydraulic Ave., interior of which is shown here. Sixty feet of loading space is provided along one side of the building, with facilities for unloading materials inside the building itself if dock facilities are taken up.

## NARC STARTS SURVEY OF REFRIGERATION CODES

In the interest of public safety, the National Association of Refrigeration Contractors has begun a survey of refrigeration codes and license provisions in 132 U. S. cities, as they apply to refrigeration contractors who install and service refrigeration and air conditioning equipment.

The survey is designed to determine to what extent the various principal municipalities in the country regulate or supervise the installation and/or maintenance of refrigeration and air

conditioning equipment through licensing of individual mechanics or employers, inspection of completed installations, or checks on work done by individuals where no licensing provision exists.

When the study is completed, NARC expects to have in its hands copies of all municipal codes now in effect throughout the country, plus information on how each city's code is enforced, how many individual mechanics (or contractor firms) are licensed in each city, the schedule of license or permit fees, and the extent

to which possibly unqualified workmen are controlled in installing refrigeration or air conditioning systems in cities which do not have specific relicensing provisions in their codes. The NARC study is being conducted under direction of Gerald W. Weston, acting executive vice president.

## CALIFORNIA CONTRACTORS DRAFT EXAM QUESTIONS

Questions which may be used in a proposed written examination for refrigeration contractors have been prepared by a committee of contractors representing the Refrigeration Contractors Association of Northern California, the Refrigeration Contractors Association of Los Angeles, and the Contractors License Board.

Contractors say that the board has indicated it will cooperate with them provided that they do not attempt to set too severe requirements for licenses. Provision for written examinations is made under one of the rules governing the licensing board.

**SPECIALIZING** in the rebuilding of hermetically sealed units of all makes and models, Refrigeration Laboratories of Clovis, N. M. already has received business from as far away as California, reports W. L. Hause, who heads the organization.

Opened for business last February, shortly after Mr. Hause's release from the armed services, the firm is operated by him in association with C. C. Conover.

The shop offers a two-year warranty on all completely hermetic units, and a one-year warranty on all semi-hermetic units. At present the firm employs three men in the sealed unit department and is turning out about four sealed units a day, with delivery date set at 15 days from the date the unit is received. The company is gradually building up its supply of stock units, and soon hopes to be able to offer immediate exchange on most models.

A small catalog which has been issued by the company will be sent to any refrigeration service organization upon request.

## NEW CONTRACTOR FIRM

Industrial Refrigeration, Inc., with E. T. Gresham of Norfolk, Va., as president, has been incorporated with capital of \$25,000 and chartered to do business as refrigeration and insulation contractors.

**Welcome**  
CONVENTION • CLEVELAND

**PERFECT  
BALANCE**

*Will see  
you  
at Booth  
502*

**Chicago Seals**  
MODERN DESIGN

**CHICAGO SEAL CO.**  
20 North Wacker Drive Chicago 6, Illinois

## SAN DIEGO GROUP JOINS NARC

The Commercial Refrigeration Association of San Diego, Calif., has become the fifteenth local association to join the National Association of Refrigeration Contractors. The 12 members of the San Diego association bring the combined national members of NARC to 534 firms.

Officers of the San Diego association are: Elton S. Bailey, Refrigeration Equipment Co., president; Ralph French, French Commercial Refrigeration, vice president; J. H. Gustafson, Gustafson Refrigeration Co., secretary; and William J. Fickler, Automatic Equipment Co., treasurer.

## JENNINGS CO. MOVES INTO NEW BUILDING

Jennings Refrigeration Co., Los Angeles refrigeration contracting firm, planned to move into a new \$125,000 building at 2900 E. Olympic Blvd. on Sept. 1, according to L. K. Brink, general manager.

Especially designed for display of equipment, the new location has a glass-faced display area across its 75 ft. frontage. Entire building will be air conditioned by an Airtopia reverse cycle system.

The Jennings company is an authorized Frigidaire dealer and does complete contracting and servicing on both ammonia and Freon equipment. Mr. Jennings has been in the refrigeration field since 1918 and has operated his own company for the past 15 years; Mr. Brink, until recently secretary-manager of the Los Angeles Refrigeration Contractors Association, was active in the formation of the National Association of Refrigeration Contractors.

## N. CALIFORNIA GROUP HOLDS CELEBRATION

Members of the Refrigeration Contractors Association of Northern California observed their first anniversary Aug. 23 with a stag dinner. I. S. Fairbanks, sales engineer for General Air Conditioning & Heating Co., Oakland, was chairman.

## NEW NORFOLK, VA. CONTRACTOR FIRM

Cox-Frank Corp., organized in Norfolk, Va., in January by J. Gilbert Frank of Norfolk and William A. Cox, Jr., of Virginia Beach, has incorporated under the Virginia laws as distributor and contractor for air con-

ditioning, commercial refrigeration and automatic heating.

Mr. Frank has had 14 years experience in refrigeration, air conditioning and heating, and also holds a contractor's license in North Carolina. Mr. Cox, who is certified as a heating and ventilating engineer in Virginia, recently was released from the army after five years' service, with the rank of colonel.

## TEMPLIN IS SECRETARY OF L. A. CONTRACTORS

Neal S. Templin, of Commercial Refrigeration Co., has been named secretary-manager of the Refrigeration Contractors Association of Los Angeles by the group's board of directors. He succeeds Larry K. Brink, who is now general manager of the Jennings Refrigeration Co., Los Angeles contractor firm. Mr. Templin has been an active member of the Los Angeles contractor body.

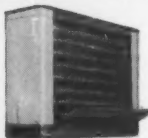
## SUPERIOR REFRIGERATION IN LARGER QUARTERS

Superior Refrigeration Supply, Kansas City (Mo.) refrigeration supplies wholesaler, has doubled its space by moving to a new location at 1816-18 Walnut St.

# SPOTLIGHT!

AND THE 3 UNIT

UNITRON for Cooling

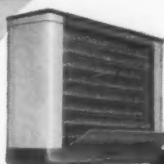


THERMOTRON

for Control



WRITE FOR  
OUR POLICY BOOK  
"YOU AND ELPECO"



COMMERCIAL LINE

It's just one of the fine products produced by Elpeco—the No. 1 component of the famous 3-Unit Line.

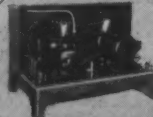
It's the successor to the unit cooler, is flush-ceiling mounted, of course, and features Elpeco THERMEK, the remarkable heat transfer surface. Unitrons are beautifully designed and finished, ruggedly built, and meticulously engineered.

Popular sizes and models are available from your ELPECO WHOLESALER. Link them up with other Green Dragon components to create a complete Elpeco system. Buy your equipment from one source with one responsibility. Buy it with confidence from your ELPECO WHOLESALER.

207

ELECTRIC POWER EQUIP. CORP., PHILA. 48, PA.

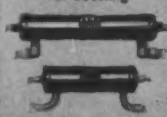
CONDENSOTRON  
for Power



EXOTRON  
for Condensing



CAPACITRON  
for Boosting



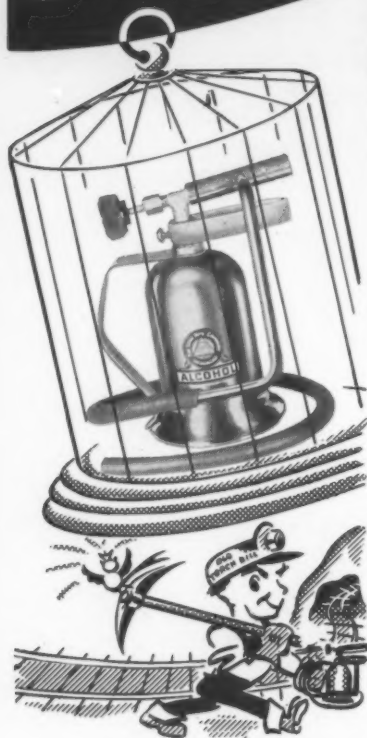
THERMEK  
for Transfer



CUBE-O-TRON  
for Ice



## MECHANICAL Canary!



In mining — the canary is used as a gas detector. In refrigeration — the LENK Halide Leak Detector locates dangerous leaks.

The Non-Clogging Burner and the Self-Cleaning Orifice make the Lenk Halide Leak Detector easy to use — easy to maintain.

Excellent as a high-heat blow torch, too. Any way you look at it, Lenk's the best buy!

• SAFE

• SURE

• ECONOMICAL

Address: Post Office Box 8-R

**Lenk** ★ ★ ★  
THE MFG. COMPANY  
NEWTON LOWER FALLS 62, MASS.  
★ ★ Manufacturers of Soldering Equipment Since 1919



## Over the COUNTER

**JIM:** In going over the list of refrigeration equipment that seems to be in particularly short supply right now, I noticed that you mention copper tubing first of all. From what you've been able to find out, what seems to be causing the copper tubing shortage?

**FRANK:** They tell me several things are causing the shortage. First, the copper miners and some workers in copper plants were out on a long strike early this year. This caused a shortage on ore and ingots and raw materials were way behind schedule. Second, the big drive to get new houses, new autos, refrigeration, plumbing and other items has developed an unprecedented demand beyond the capacity of the mills to produce. Third, some shortages of skilled labor are also holding back full production in some of the mills.

**JIM:** What is our situation regarding tubing—do we have any stock?

**FRANK:** Little or none in the popular sizes. We have placed orders for all the tubing we can safely handle and as fast as shipments come in we ship it out to customers who have orders with us.

**JIM:** How do you decide who to ship to?

**FRANK:** We take our back orders, arranged according to the date received and go down the line allotting some tubing on every order we can until the entire shipment is used up. When the next shipment is received we continue along allotting some stock to all orders and when we reach the end of the list we start back at the beginning again and continue this way. As orders are completed we remove them from the back order list and of course, keep adding new orders as they come in.

**JIM:** That looks like a fair way to take care of it and give as many of our customers some stock.

**FRANK:** I can't figure out any other way to handle it and give everyone a break.

**JIM:** What do the copper mills say about the future situation on shipments?

**FRANK:** Most of the ones I talk to seem to think the copper situation will be tight for some time to come. At least all of the remainder of this year and perhaps not too much improved in 1947—at least not in the first half of the year.

**JIM:** I think we should instruct our men to carefully explain this situa-



"Meet the Missus—she'll be looking after things while I'm at the All-Industry Show."

tion to all our customers so they'll understand we're doing everything we can to meet this situation.

**FRANK:** We're explaining the situation to the trade, and most of our customers are placing orders with us for delivery as fast as we can fill the orders.

**JIM:** What's the present situation on condensing units? I was hoping this situation would start getting better.

**FRANK:** I haven't had a chance to check up, but I believe we have received more condensing units this year than we ever received before, but the demand is so great and customers orders come in so fast that we are always way behind in filling



orders. Most of our customers have orders placed with us, and we ship as fast as units are received. So many jobs wore out during the war that everyone seems to be trying to get new equipment, all at the same time, and orders really pile up fast.

JIM: Are you handling our customers' back orders on condensing units like you do with tubing?

FRANK: Somewhat along the same line. We allot all shipments as fast as received and try to spread the stock over as many orders as we can, to help out as many customers as we can.

JIM: Do the manufacturers expect that the situation will improve soon?

FRANK: Some feel that the situation will slowly improve, but they don't give us much encouragement for the balance of this year. To begin with, the shortage of copper is holding back motor production. Castings for compressor bodies are a real bottleneck, and show little or no sign of improving.

Shipments on accessories used on condensing units are irregular and slow, as again the demand for such items is terrific as everyone trying to manufacture equipment using such items is attempting to build up their production and placing large production orders for these items.

It looks as though we are still some time away from the days when we will be able to fill orders from our stock.

JIM: I suppose the tight casting situation is also responsible for the shortage of compressor bodies for replacement purposes.

FRANK: That seems to be the main factor responsible. However, production manpower also enters into this situation as the great demand for complete condensing units for new equipment and replacement uses is about all that most manufacturers can keep up with and this naturally has a tendency to somewhat curtail the output on compressor bodies for replacements.

JIM: This situation is really a tough one to handle; but when you stop to analyze it you can quickly see that the industry is bending over backwards to do all it can to meet the huge demand that confronts it.

## NOVEL DUAL-TEMP FLOOR DISPLAY PREPARED

Dealers who display and sell Admiral Dual-Temp refrigerators won't have to stock their floor models with artificial fruits and vegetables if they use the new floor display material which the company has recently prepared. The panels fit right into the refrigerator, and when closed are used to portray how the unit appears when filled with food. For demonstration, the panels open to show the empty refrigerator, with the panels becoming

informative selling pieces. Permanent sections of the display call attention to "no defrosting" and other Admiral features. The display has been timed to coincide with first shipments of new models to dealers.

## S. F. MALCOLM ADVANCES

Stuart F. Malcolm, formerly in charge of commercial refrigeration and appliance sales for Borg-Warner International, has been appointed acting manager of that company's automotive section.



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Summer, winter, spring or fall . . . every season is the right season to push the sale of Temprite draught beer coolers! **DON'T MISS** the profit possibilities in Temprite coolers just because the weather cools off. *Draught*

*beer is always in demand in EVERY SEASON.*

Temprite units are ideal for both reconditioning (where the condensing unit is available) or new installations.

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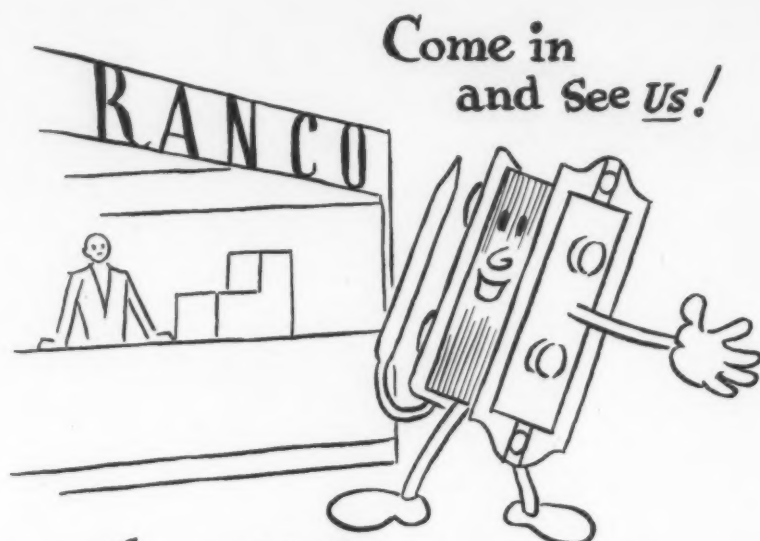
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*Liquid Cooling Devices*

41 PIQUETTE AVENUE

DETROIT 2, MICHIGAN



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in Cleveland*

Have fun, friends—we intend to—but  
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We will be in booths 324-326 during the  
four-day show in Cleveland Public Audi-  
torium.

*Ranco Inc.*

COLUMBUS 1, OHIO

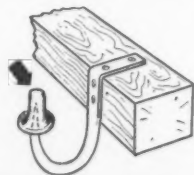
"Let's share our knowledge—exchange our experience"

# Here's how

## Dealing With a Stuck-Up Rollator

To those of you who work on Norge Rollator compressors, the following method for dealing with a unit that has been stuck-up and out of service for a period of time, submitted by John H. Hunter of Wilmington, Delaware, should be of interest:

"First (says Mr. Hunter) I take each piece from the Rollator and drop it immediately into a bucket of gasoline (no lead) as I take it apart. Then I take a fine grade of emery paper and soak it in the gasoline.



**WORKING** in walk-in coolers, I find that meat hooks are very dangerous when you are putting in a valve or making adjustments. I carry two dozen  $\frac{5}{8}$ " rubber plugs that are used to seal ends in coils, and insert them in each hook in the area where I am working.

Thomas J. Schiavone,  
Bridgeport, Conn.

I then rub the emery cloth on metal to remove the sharpest particles of emery. Then I polish each part with the emery cloth.

"As I finish each piece, I coat it with oil. When all parts are polished, I re-assemble the Rollator, using new gaskets and seal. Then I bake it, at the same time evacuating and maintaining a 220 F. temperature. After this operation is completed, I close the service valves, remove the unit from the oven, connect the gauge manifold and after purging gauge lines admit enough SO<sub>2</sub> to the Rol-

lator to break the vacuum to a pound or two pressure. The oil also may be added at that time, or it may be put in after the Rollator has been replaced."

**TO PREVENT** moisture entering unused coil of tubing, I cut off the required portion with side-cutting pliers or tinners' snips, then paint the flattened end with a coating of clear fingernail polish. Any kind of lacquer or plastic cement will serve the same purpose.

Milton E. Smoyer,  
Kansas City, Kan.

## New Products

Among products recently introduced are two which should hold some more than ordinary interest for refrigeration service operators. One of these is a ready-mixed chrome paint, and the other is a protective coating material which protects against corrosion.

The chrome paint, known as "Chromatone", is ready-mixed and requires no separate mixing before

**AFTER** I have installed a sweat fitting installation, I always test the system by introducing refrigerant in the vapor phase into the lines and lowside through a charging valve or tee in the lines. I do not open the high side valves until all joints have been found O.K.

In this way even very small leaks are quickly found usually by sound, and quickly fixed also since the leak has no oil in it as would be the case if the refrigerant in the high side were used.

Furthermore, refrigerant vapor is thinner than refrigerant and oil and will find a leak more readily.

Edward A. Wenk,  
New York City

Edited by  
Warren W. Farr

being used. It is adaptable to either indoor or outdoor application on metal, wood, or glass. It sets in 20 minutes, dries in 2 to 4 hours, and can be used with either brush or spray gun; it is also said to have good rust-resistant properties.

The corrosion-resistant material is called Cotoid, and is said to stand up against acids, brines, alkalis, chlorides, oils and similar substances. It can be used for protecting walls, wood or steel structural work, or for coating inside and outside of containers in which corrosive solutions are stored. The material will withstand a maximum air temperature of 220 F.



**I FOUND** that I can use one of these storage tanks that is used at filling stations for taking out to pump up a tire.

I took one of those and put a blow gun on it to blow out condensers. I stop at a filling station and fill it up with air and carry it in my service truck.

Cecil C. Blevins,  
Big Stone Gap, Va.

and won't crack under temperatures as low as minus 20 F.

If you want more information on either of these products, drop us a note in care of *Here's How* and we'll see that you get it.

## Set Your Own Quota For Commercial Sales

The old rule of thumb method for figuring the commercial refrigeration dollar market in a territory used to be "a dollar of sales for every person in the territory". With the huge replacement market that's been built up by the war, it's probably safer, today,

# THE SERVICE MAN'S DEPARTMENT

to set that figure at \$2 or \$3 of sales per person.

Since the war's end, a good many new dealerships have been set up in commercial refrigeration. To set their sales potentials, all they need do is to count noses in the territory, multiply by 2, and they have the answer. A community of 50,000 persons, for example, may be estimated to be worth between \$100,000 and \$150,000 in commercial sales per year under existing demand conditions. In an average year, its potential would be roughly \$50,000.

## Odorless Purging of SO<sub>2</sub> Machines

FOR some time our shop was located right up in the business section next to our sales departments. This left us no means of purging or emptying a sulphur dioxide unit except into the sewer which was not very accessible. I thought you might be interested in the purging unit I rigged up for a few dollars recently. We are still using the same solution by purging slowly; a fresh mixture will take the gas service valve wide open.

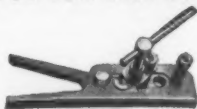
The equipment is merely a galvanized five-gallon can with a ring manifold suspended a few inches from the bottom. This manifold is made up of 5/16" copper tubing; several 1/16" holes are drilled around the outer side of the ring to give even distribution of the gas into the solution. At the other end of the manifold a shoulder ferrule is pressed down tightly with an extra fitting, and then the nut on the tubing is slipped back so that a hose of the proper size can be twisted on with the help of a drop of glycerine. The upright tube is clamped onto the inner side of the can.



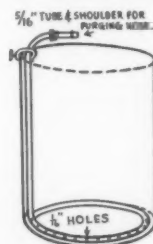
With 4-ways better 'Superior' tubing, you have nothing to hide either in your new product or for use in servicing the old. Moreover, nothing can hide inside 'Superior' tubing for no dirt, filings, or other particles can cling to the bright, clean, shiny inside surface. We can't hide the fact that we're not making enough 'Superior' to go around at present but we assure you "after the pressure is off" Penn's increased production will meet with your requirements.

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In presenting a selective clamp, we have developed a tube flaring tool which will quickly select the size for all jobs requiring hand tube flaring. With all parts specially hardened, you have definite assurance of long life and smooth handling in each Papco #400 tube flare tool... Write for latest Papco Bulletin.



Solution formula for 4 gallons is as follows:

Water (105-120°F.)	3 Gal.
Calgon (Metaphosphate)	.1 oz.
Sodium Sulphite	2 lb., 8 oz.
Kodalk (Metaborate)	.7 lb., 8 oz.
Cold Water to make	4 Gal.

Note: Dissolve each chemical thoroughly before adding the next chemical.

The formula is based on a portion of a conventional photographic formula, (F-6), which is introduced in processing solutions to kill the SO<sub>2</sub> formed by chemical reactions. The chemicals in this purging solution play rather simple parts: Calgon (Metaphosphate) reduces osmotic pressure of the water, giving more even distribution of the sulphur dioxide and makes it easier to dissolve the chemicals when mixing.—Sodium Sulphite is the preservative, preventing decomposing and oxidation.—Kodalk (Metaborate) is one of the strongest neutralizing reagents for SO<sub>2</sub>.

The solution is not poisonous or corrosive; no heat is generated by reaction of the sulphur dioxide.

If the hook-up is good and tight and the formula properly compounded, this little purging unit will pay for the expense and work many-fold. Should there be some odor coming out, it is a sure indication that purging is a little too fast or the solution needs to be replaced.

Joe W. Langford, Waco, Tex.

# PENN

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Aminco Oil Separators protect compressors by maintaining correct oil level in crankcase and by excluding oil from refrigerant stream they enable coils, condensers, valves and dehydrators to function most efficiently.

These oil separators are made for jobs from 1/2 H.P. to 120 tons and are used everywhere, ashore or afloat, where efficient refrigeration is desired.

Full descriptive bulletins on request.

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REPEATEDLY

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Send in your old unit board. Just unfasten suction and liquid line, loosen the bolts holding the board and ship complete. All we ask is that the pumps are in fair shape and all parts are with them.

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Refrigeration serviceman capable of handling commercial service. Must be able to take care of department. Have Frigidaire connection. Write, stating qualifications, and salary expected. Hugh R. Etter Electric & Refrigeration, Plainview, Texas.

Southern manufacturer requires services of competent, trained refrigeration engineer. Prefer man having degree in electrical engineering and experience in the service of nationally known refrigerator manufacturers. Position is as consultant and research engineer. In reply please give full details as to background, education, salary requirements, etc. All replies will be held strictly confidential. Box 3046, The Refrigeration Industry.

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## POSITIONS AVAILABLE

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